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ABSTRACT

A combined meeting of the Tenth Regional Consultation Meeting on the Asia and Pacific Programme of Educational Innovation for Development (APEID) and the Regional Experts Meeting on the Regional Programme for the Universalization and Renewal of Primary Education and the Eradication of Illiteracy in Asia and the Pacific was held to provide an opportunity for member states to review the work of APEID during its third program cycle (1982-1986), to define new directions of APEID during its fourth program cycle (1987-1991) and to consider and prepare a draft of the Asia-Pacific Programme of Education for All (APPEAL). This work plan provides a general framework for APEID activities during the fourth program cycle. On the basis of this work plan, annual schedules of APEID are formulated. The work plan has three major program areas with subcategories. The first major area, "Education for All," includes universal primary education and continuing education. The second, "Making Education Relevant to Societal Requirements," includes education for rural development, education for the world of work, science and technology education, education for the future, restructuring secondary education, morals and values education and special education. The third, "Supporting Activities and Infrastructures," includes research and development, curriculum development, training educational personnel, educational technology, and distance education. (CW)

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WORK PLAN OF APEID

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ASIA AND THE PACIFIC PROGRAMME
OF EDUCATIONAL INNOVATION
FOR DEVELOPMENT

Programme Development Meeting
Bangkok, 28 May - 2 June 1986

WORK PLAN OF APEID for the Fourth Programming Cycle 1987 - 1991

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BKA/87/OPE/129-2000

FOREWORD

A combined meeting of the Tenth Regional Consultation Meeting (RCM) on the Asia and Pacific Programme of Educational Innovation for Development (APEID) and the Regional Experts Meeting on the Regional Programme for the Universalization and Renewal of Primary Education and the Eradication of Illiteracy in Asia and the Pacific was held in Bangkok on 20-27 May 1986. The purposes of the combined meeting were to provide the opportunity for experts from Member States to review the work of APEID during its third programming cycle (1982-1986), to define new directions of APEID for the fourth programming cycle (1987-1991), and to consider and prepare the draft Regional Plan of Action for the Regional Programme for the Universalization and Renewal of Primary Education and Eradication of Illiteracy in Asia and the Pacific. This Regional Programme is to be known as the Asia-Pacific Programme of Education for All (APPEAL).

The Meeting was then formed into a Programme Development Meeting (PDM) which was held from 28 May to 2 June 1986. Based on the suggestions and recommendations of the two meetings mentioned earlier, the PDM prepared the Work Plan of APEID activities for its fourth cycle (1987-1991), and those of the new Asia-Pacific Programme of Education for All (APPEAL).

The reports of the meetings have been published in four co-ordinated and interrelated volumes. The report of the Regional Consultation Meeting contains the findings of the Tripartite Review of Project RAS/82/015, the overall review of the progress of APEID during 1982-1986, and the recommendations concerning new directions of APEID for the fourth programming cycle, particularly its programme areas of concentration.

The report of the Regional Experts Meeting on the Regional Programme for the Universalization and Renewal of Primary Education and the Eradication of Illiteracy in Asia and the Pacific records the considerations on the new programme and proposals for its implementation.

The third and fourth volumes contain the detailed Work Plans of APEID for its fourth cycle, and of APPEAL for its first cycle.

This work plan provides a general framework for APEID activities during the fourth programming cycle (1987-1991). On the basis of this work plan, annual schedules of APEID activities are formulated, with due regard to available resources and funding.

* * * * * * *

The activities proposed for implementation within the framework of APEID in the programme areas of "Universalization of Primary Education" and "Continuing Education" will be carried out within the framework of APEID and APPEAL.

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PROCEEDINGS

Background

1. The Programme Development Meeting (PDM) followed immediately the combined meeting of the Tenth Regional Consultation Meeting (RCM) on the Asia and Pacific Programme of Educational Innovation for Development (APEID) and the Regional Experts Meeting on the Regional Programme for the Universalization and Renewal of Primary Education and the Eradication of Illiteracy in Asia and the Pacific. The PDM based its work on the recommendations contained in the reports of the combined meeting.

Participation

2. The meeting was attended by 45 participants and observers from Afghanistan, Australia, Bangladesh, China, Fiji, India, Indonesia, Iran, Japan, Lao People's Democratic Republic, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Samoa, Socialist Republic of Viet Nam, Sri Lanka, Thailand and Tonga.

3. The list of participants is at Annex I.

Officers of the meeting

4. The meeting unanimously elected Professor Donald Bewley (New Zealand) as Chairperson, and Mr. A.G. Mufti (Pakistan) as Rapporteur-General. The Secretary-General for the meeting was Mr. J. Beynon until 30 May when he was succeeded by Mr. M.I. Khan. The Secretary-General was assisted by Mr. H.K. Paik and Mr. T.M. Sakya.

Working methods of the meeting

5. The meeting conducted its work principally in three groups, each related to a major programme area identified in the previous combined RCM and Regional Experts Meeting, that is:

I. Education for all

II. Making education relevant to societal requirements

III. Supporting activities and infrastructures common to all educational levels and systems.

6. Each group elected its own officers:

Group I: Dr. W.P. Napitupulu (Chairperson)
Mrs. Aileen Treloar (Rapporteur)

Group II: Dr. Moegiadi (Chairperson)
Dr. Geraldine McDonald (Rapporteur)

Group III: Mr. Paula S. Bloomfield (Chairperson)
Mr. D.A. Perera (Rapporteur).

7. The meeting held periodic plenary sessions to maintain common awareness, to integrate the work of the groups and to recognize any issues and problems as they arose.

8. The officers of the Meeting, the officers of the groups and some key members of the Secretariat constituted a Steering Committee to assess the direction and progress of the Meeting's work.

9. The aim of all groups was to produce draft work plans for the period 1987-1991, the fourth cycle of APEID and first cycle of APPEAL. For this purpose, it followed the guidelines for programmes which resulted from the work of the previous combined meeting; but for the format, guidelines were prepared by the Secretariat and revised by the Meeting. Each group devised its own procedures and process for dealing with its particular programme area, but sought to present work plans in a common format. A résumé of each group's progress is as follows:

Group Programme I: Education for all

10. There were three sub-topics within this major area: eradication of illiteracy (EOI), universalization of primary education (UPE), and continuing education (CED). The group discussed at length the most appropriate mechanism for planning and co-ordinating these three intertwined areas. CED is particularly important since UPE is largely wasted if there is no follow-up, and EOI also needs CED to maintain and extend the newly won skills. EOI is closely linked with the efficacy of UPE, since family support is perhaps the single most important factor in whether children value the education they receive, and whether they continue. The education of women and girls in initial and continuing education programmes is particularly important, since women are generally more concerned for the welfare of their families. For a time the group felt unable to separate out CED, but finally it was decided to maintain that as a separate working group in order to mark its importance.

11. There was a lengthy discussion on the format and content of the proforma describing the programme area and its three sub-topics. Relevant information was extracted from the APEID and APPEAL documents. This was done and the resultant document was discussed at length and agreed upon. The group then split into three sub-groups, EOI, UPE and CED which worked in a variety of ways.

12. *Eradication of illiteracy.* There were six topics taken from the working document Asia-Pacific Programme of Education for All (APPEAL) to be discussed. The first, "Development of phased and viable literacy strategies to cover all illiterate adult populations" was discussed by the sub-group at some length, to establish a pattern for work. Then each member developed an area independently. This was followed by more group discussions. This process of group-individual-group worked extremely well, and the documents produced express the agreed wisdom of the group.

13. *Universal primary education.* The members of this group met together for extended discussion on identifying substantial aspects of programme areas that were to be developed at the next stage. The group then sub-divided into smaller groups, which sometimes subdivided again to individuals, in order to work out the action plan in detail. These subgroups and individuals met occasionally for discussion, or had informal consultation with one another. Since the substantial content of different programme areas had been agreed initially, it was possible for the written drafts to be given directly to the sub-group chairman.

14. *Continuing education.* This group met together to discuss general issues and specific objectives related to continuing education in the context of "Education for All". The structure determined for this programme area, containing three sub-programmes, was found

inadequate for the task, and had to be changed to four sub-programme areas. The group sub-divided into four working groups. While they were working, group members responded to their need for frequent consultation with each other.

Group Programme II: Making education relevant to societal requirements

15. The task of this group was to develop programmes, sub-programmes, activities and projects within the seven areas set out in the Report of the Tenth Regional Consultation Meeting on APEID.

16. Under the Chairman's guidance, the group first discussed the meaning of relevance to societal requirements, and agreed that the success of innovations initiated through the APEID network must be evaluated against one or more societal factors which were relevant to the country under consideration. A time frame of five years was adopted as the limit for forecasting societal requirements, but it was also agreed that futures studies were needed and would take a longer perspective.

17. The group as a whole then discussed each of the seven sub-programme areas in turn, canvassing the main issues as they were seen by the various countries represented by the participants and looking for linkages with the areas being discussed by the other groups.

18. When all areas had been discussed, the large group broke up into smaller groups, each of which was asked to draw up a programme of action for one of the seven areas and to present their findings in the standard format. The whole group next met to share the results of their work and to check that it was being presented in a uniform way. To help this process, a sample of what was required was prepared for the area of Science and Technology Education. As each small group prepared the rationale for its own area, the present position, and the action required, the Secretariat members monitored the way in which it was being presented. In this way the contributions of the participants were interwoven with the professional guidance of the Secretariat, and in the large group sessions, there was time for sufficient discussion to allow the members of the group to learn from each other, to arrive at a consensus on the nature of the task and to achieve a common understanding of the major programme area.

19. Each introductory statement was built up from records of general discussions, from the group rationales supplied by the small groups for each separate area, and from APEID documents.

Group Programme III: Supporting activities and infrastructures

20. In keeping with the decision arrived at in the plenary session which discussed the working of the three groups, the group spent only a little time during the first two days in meeting by itself. Instead, the members of the group divided themselves up to participate in the deliberations of Group I and Group II. Since Group III was concerned with programme development in the area of supporting services and infrastructures, it was felt that working with the other groups for some time would give a better idea of what support was needed. Towards the end of the second day, the group divided and worked in sub-groups to develop outlines for programme actions in its five different sub-programmes. The group recognized its task as identifying programme actions to strengthen the supporting services and infrastructures, taking into consideration their intended use in other programme areas.

Closing Plenary Session

21. The Programme Development Meeting held a plenary session on its last day to adopt a draft report of its proceedings. It also received the draft work plans from all three working groups for transmission to the Unesco Regional Office for Education in Asia and the Pacific (ROEAP).

WORK PLAN

MAJOR PROGRAMME AREA: EDUCATION FOR ALL

Programme area: Universalization of primary education (UPE)

Action programmes

UPE/1 : Enrolment and retention of all primary school-age children with particular emphasis on girls

UPE/2 : Education of the disadvantaged

UPE/3 : Improvement of the quality of primary education

UPE/4 : Planning and management of UPE at micro level

Programme area: Literacy training (LIT)

Action programmes

The activities in this area appear in the work plan of the Asia-Pacific Programme of Education for All (APPEAL) under the programme area "Eradication of Illiteracy"

Programme area: Continuing education (CED)

Action programmes

CED/1 : Parental education

CED/2 : Linkage between formal and non-formal education, and functional continuing education programmes

CED/3 : Work-oriented continuing education

CED/4 : Promotion of supportive learning environment

CED/5 : Raising literacy levels and continuing education

MAJOR PROGRAMME AREA: EDUCATION FOR ALL

The Asia and Pacific region, known for its contribution to knowledge and for being the birthplace of ancient civilizations of great literacy traditions, has now become the centre of gravity for illiteracy. Nearly three quarters of the world's 857 million illiterate adults, an estimated 618 million women and men reside in Asia and the Pacific. In addition, some 350 million school-aged young people aged 6-23 years remain outside the education system.

It is a populace of this magnitude that needs to be served if the region is to attain the goal of "Education for All" by the year 2000.

All the countries of the vast Asia and Pacific region have indeed recognized education as an essential element of development strategy, and they have achieved marked success in changing the profiles of education and literacy, resulting in a rise in the aggregate literacy rate from 53.6 per cent in 1970 to 63.7 per cent in 1980. The absolute number of the illiterate population, however, has also increased during the same period by 80 million. The rate at which the adult population is gaining literacy is clearly outstripped by the rate of population growth and the continuing phenonmena of primary school drop-outs. The illiteracy problem is further intensified by a high degree of relapse to illiteracy among neo-literates, resulting from inadequate opportunities to use and upgrade the newly acquired skills and by the emergence of newer forms of illiteracy caused by advances in science and technology and the changes in the society.

If UNESCO's goal of "Education for All" is to be attained so that no one within the Asia and Pacific region is left illiterate and uneducated, the countries in the region must be supported to provide universal primary education, eradicate illiteracy among the out-of-school population and organize continuing education opportunities for neo-literates and primary school leavers to further enrich their knowledge and competencies.

Overall aim

To stimulate and support, through regional co-operation, national efforts of the Member States to

i) achieve universal primary education;

ii) eradicate illiteracy; and

iii) provide continuing education.

Specific objectives

To promote and strengthen national efforts and mutual co-operation among the Member States in attaining the goal of Education for All through the following specific objectives:

1. To stimulate and further intensify national recognition and commitment for the Education for All campaign;
2. To strengthen national capabilities and create appropriate infrastructure for planning, management, research and development;
3. To promote development of innovative strategies in literacy education, primary education and continuing education, particularly to serve disadvantaged groups;

4. To mobilize human, material, financial and technical resources from the communities, various sectors within the countries and international organizations in support of the Education for All campaign;
5. To encourage sharing of information and experiences among the Member States.

Target groups and special considerations

The Education for All programme is designed to be a mass education movement involving people from all segments of the society who can participate both as contributors and as beneficiaries. There are, however, certain groups within the society whose needs and problems must be given special attention in programme development, namely;

- Women and girls
- Out-of-school children and youth
- Rural area dwellers
- Urban slum dwellers
- Minority groups
- Parents
- New literates
- The hundicapped
- Low achievers and potential drop-outs.

At the regional level, while all countries will participate in the programme, it is proposed that special emphasis be given to support the following groups of countries in their struggle to achieve Education for All:

i) Countries where the current literacy rates are below 50 per cent and/or primary school enrolment rates are less than 70 per cent (Papua New Guinea, Bangladesh, Pakistan, Afghanistan, Bhutan, India, Iran, Nepal)

ii) Small island states.

Programme areas and action programmes

Under APEID, attention will be focused on innovative strategies and approaches in two programme areas:

1. Universalization of primary education; and
2. Continuing education.

Under "Universalization of primary education", four action programmes were identified:

1. Enrolment and retention of all primary school-age children with particular emphasis on girls;
2. Education of the disadvantaged;
3. Improvement of the quality of primary education;
4. Planning and management of UPE at the micro level.

Under "Continuing education", five action programmes were identified:

1. Parental education;
2. Linkage between formal and non-formal education, and functional continuing education programmes;
3. Work-oriented continuing education;
4. Promotion of supportive learning environment;
5. Raising literacy levels and continuing education.

Expected major outcomes

Two levels of major outcomes are expected:

Level 1 Within each Member State, there will be:

1.1 effective policies and strategies for the eradication of illiteracy, achievement of primary education and provision of continuing education;

1.2 development of infrastructures and improved national capabilities for planning and implementation of Education for All programme;

1.3 increased participation and mobilization of resources within the countries and effective mechanisms for such mobilization;

1.4 increased experiences and expertise which can be used to promote Education for All programme in countries within and outside the region.

Level 2 By the year 2000, the attainment of the first level of outcomes will contribute towards:

2.1 achievement of primary education;
2.2 eradication of illiteracy; and
2.3 provision of continuing education.

The definition of the terms as well as the specification of the target groups, however, will depend upon the needs and priority of each Member State.

Monitoring and evaluation

1. Integrated management information system should be set up at the national and regional levels to continually assess the literacy and primary education status as well as to examine the coverage of the continuing education programme.
2. There should be regular and periodical monitoring and follow-up of the progress conducted at the national and regional levels.
3. Evaluation of ongoing and innovation strategies will be carried out to determine their effectiveness, identify areas for improvement and assess their potentials for expansion.
4. Information from the information system, monitoring and follow-up system and evaluation will be fed into policy formulation and planning mechanisms at both the national and regional levels as well as disseminated for public information.
5. Monitoring and evaluation will be designed to be participatory and to promote self-diagnosis and improvement.

Programme area: Universalization of primary education (UPE)

Accees to primary education has long been recognized as an indispensable tool for individual, community and national development. Universal primary education was first adopted as a goal for the countries of the Asian region in the "Karachi Plan" (1960) which proposed "that every country of this region should provide a system of universal, compulsory and free primary education of seven years or more within a period of not more than 20 years (1960-1980). . ."

In spite of concerted efforts to provide universal primary education, only a few countries within the Asian region have attained the target set forth in the Karachi Plan. At present seventeen countries with 48.5 per cent of the total regional population have a gross enrolment ratio of over 100 per cent. Only for countries, however, have achieved universal primary education. Six countries, accounting for 30.2 per cent of the regional population, have reached 85-99 per cent gross enrolment, while five countries with 7.5 per cent of the total regional population have less than 70 per cent gross enrollment ratios, ranging to a low of 15 per cent.

Taking the region as a whole, the provision of universal primary education is hampered by the problems of low enrolment, high drop-outs and repetitions, high incidence of relapse into illiteracy, especially among those who fail to complete five years of primary education, and poor quality primary education.

Specific objectives

To assist the Member States to promote the achievement of universal primary education by the year 2000 through the following specific objectives:

1. To promote universal participation and retention of primary school-age children in primary education programmes, both formal and non-formal;
2. To improve the quality of education to ensure adequate preparation for life;
3. To strengthen national capabilities and infrastructure for effective planning, management training, research and development for primary education;
4. To promote regional co-operation and sharing of knowledge and information.

Target groups

This programme area will serve all primary school-age children. Priority will, however, be given to the following categories of children:

1. Girls;
2. Primary school drop-outs;
3. Economically, socially and physically disadvantaged children;
4. Ethnic minorities and linguistic groups, nomads, tribal groups and people in geographically difficult, isolated and remote areas.

Action programmes

Four action programmes are identified;

UPE/1 – Enrolment and retention of all primary school-age children with particular emphasis on girls

UPE/2 – Education of the disadvantaged

UPE/3 – Improvement of quality of education

UPE/4 – Planning and management of UPE at micro level

Expected outcomes

Universalization of primary education is expected to be achieved by the year 2000 through:

1. Participation and retention of all pupils to the completion of primary education;
2. Improvement of quality of education;
3. Increased national capabilities and more effective infrastructures for planning, management, research, training and development of primary education; and
4. More effective regional co-operation and sharing of knowledge and information.

Monitoring and evaluation

1. Periodic assessment and report concerning the progress of primary education;
2. Regular monitoring and evaluation of activities in the programme areas at the regional and national levels.

Programme area: Universalization of primary education

Action programme: UPE/1. Enrolment and retention of all primary school-age children with particular emphasis on girls

In spite of concerted efforts to provide universal primary education, in 1982 over 100 million children in the compulsory age group of 6-14 in the region were not enrolled in schools. Universalization of primary education is further hampered by high drop-out and repetition rates. Studies have shown that drop-out rates range from 3 per cent to as high as 80 per cent, accounting for more than 33 million children per year. The average repetition rate among primary school students is found to be around 12 per cent. While the general causes of non-enrolment, drop-outs and repetitions are often known, they are complex and difficult to tackle, being rooted in the geographical, social, cultural, economic as well as educational conditions of each country. Due to reasons of poverty, cultural traditions, distance between schools, home environment and the need to help with family chores, girls account for the large majority of non-enrolled children and drop-outs.

In order to achieve universal primary education, it is most imperative, therefore, that UNESCO continues to assist the Member States in promoting the enrolment and retention of all primary school-age children with particular emphasis on girls.

Specific objective

1. To support and promote research studies relating to the problems of non-enrolment and drop-outs of school children;
2. To support the development of innovative approaches and schemes focused on increasing enrolment and prevention of school drop-outs;
3. To explore ways in which formal and non-formal programmes can be complementary to each other to raise the participation rate, reduce wastage rates and to provide for learning that constitutes a preparation for life and a basis for continuing education;
4. To strengthen national capabilities in developing curriculum and learning materials for use in non-formal primary education schemes.

Target groups

1. All out-of-school children of primary school age who do not enrol in formal or non-formal education programmes with particular focus on girls and those living in rural and remote areas;
2. Primary school children with emphasis on those who are considered to have "high risks" for drop-outs and repetitions;
3. Personnel involved in the provision of primary education.

Activities

See table on the following pages.

Expected Outcomes

1. More information on causes of non-enrollment and drop-outs and effective strategies

2. Development of more innovative approaches to promote participation and retention of primary school children, to provide non-formal education for out-of-school children and girls' education
3. More effective national capabilities in curriculum and national development
4. Greater regional co-operation and sharing of experiences

Monitoring and Evaluation

1. Periodic assessment of enrollment, and retention rates among different target groups.
2. Evaluation of programme activities.
3. Assessment of regional co-operation and sharing of experiences.
4. Evaluation of understanding and capabilities among key national personnels.
5. Assessment of information for programme planning and development.

Activities (UPE/1)

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
UPE/1.1	Case studies on successful programmes involving parents and community in ensuring highest rate of enrolment and articipation (successful innovations).	7-9 months	– Constitute a national research team – Consultation with education administration and local officials, planning commissions	Policy makers planners and researchers	– National research team – follow-up national seminar	Report of case studies dissemination of findings
UPE/1.2	National level seminars on the case studies to develop strategies and national policies and to develop materials for motivational campaign involving: – parents – communities and – teachers	10-12 days	– Draw up plans and programme for launching national campaigns	Policy makers planners parents community leaders teachers social workers	Plan for national and local campaign	As above
UPE/1.3	Dissemination of information on successful innovations in the region dealing with: – textbook production – teacher preparation – legal provision for UPE – development of effective learning packages – Community enrolment (action groups) etc.	On-going	– exchange of materials network participating countries. – preparation of synthesis and publication of newletters, digest and their distribution in the region.	Various category of personnel in participating countries	– Feedback from countries on relevance and usefulness of information generated and distributed	– Series of national, regional and sub-regional publications

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
UPE/1.4	Mobile Training Teams on Textbook production, preparation of teachers and development of learning packages.	– Study visits-2-3 weeks – literacy workshops 2-3 weeks	– Key level specialists will visit one or two countries for sharing experience on related subject and plan and organize national workshops, possibly with support of resource persons.	Key level specialists who would be involved in workshops and personnel involved at grass-roots on the subject.	To be undertaken by the core responsible for the mobile team, in terms of skills developed by participants and action plans.	– Training methodologies and materials
UPE/1.5	Study visits for exchange of experiences on successful innovation for increasing enrolment and participation in primary education	2 weeks	– Prep. of plans on the basis of crucial needs, visit to countries for sharing experiences and conduct a national training programmes. – Visit actual project sites – Consult with specialists and national official – Prepare critical individual assessment	Specialists and personnel involving textbook production, teacher preparation and learning packages development. Specialists and policy makers involved in UPE	– evaluation in terms of new skills developed by those participating in the training workshops – Follow-up nat. discussion groups to disseminate the experience gained – report to ACEID on the outcomes	– Training of personnel for development of textbooks, teacher and learning packages. – Individual assessment report on the visit. – Country report on how the experience of the person would be utilized.
UPE/1.6	Mobile Team Training of Educational Personnel for Girls Education	– Study visits 2-3 weeks – National workshop 2-3 weeks	– key level specialists will visit one or two countries for sharing experience on girls education and plan and organize national workshops possibly work support of resource persons	Key level specialists who would be involved in national workshops and personnel involved at grass-roots level for promotion of girls education.	To be undertaken by the core responsible for the mobile team in terms of skills developed by participants and action plans.	– Training methodologies and materials.

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
UPE/1.7	Joint Innovative Project on Promotion of Girls Education (Development of Alternative and Complementary Forms of Education for Girls including curriculum development, training of teachers and community mobilization).	2-3 years	– Identification of countries intrested in the project and develop relevant background materials. – Organize a regional planning, meeting – Launch a research and operational project in participating countries. – Exchange experiences between participating countries – Joint evaluation and development of strategies for improving education programmes focus on girls.	Policy level specialists involved in the promotion of girls education, researchers, programmes developers and various functioners at grass-root level.	– The programme will be constant monitored and evaluated at country level by a high level multidisplinary project committee and will be reported at regional level periodically.	– Materials, curriculum, learning packages and teacher training materials and ulternative modes and forms of education for girls.
UPE/1.8	Retention					
	(a) National studies that have proved successful in improving retention.	Jan.-June 1987	– constitute a national research team. – consult with education officials.	A team of six leading educationists in each participating country	Set objectives for study to cover. Evaluate if objectives have been met and how well.	The identification of successful strategies in the region that have improved retention.
	(b) Regional seminar to debate the study findings and make a report.	September 1987 (1 week)	– exchange findings – countries consult	One person from each participating country who has been active in the study.	Each participant to give realistic evaluative report on the seminar. Questionnaire to be developed.	A report of all successful strategies developed and used in the region.

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
	(c) Dissemination of information	Oct.-Nov. 1987	The above report to be disseminated	ACEID/ROEAP staff	Was material received? How was it used?	
	(d) National Workshops to be held in country run by the regional seminar attended and the team that did the study.	March/April 1988 (1 week)	To develop and adapt strategies that could be adopted in the country.	Senior education administrators in each province and selected officers of the national department of education.	Evaluate against a series of objectives. Did workshop meet the objectives and how well?	A list of proven successful strategies from the region that can be applied on adapted for use in the country. A report on the workshop.
	(e) Joint Innovative Project	1988	An initial meeting followed by constant communication.	A group of countries with similar problems and who believe similar strategies could help overcome the problem.	Set objectives were they met and how well?	A project to help overcome the problem by further joint development of strategies.
	(f) Evaluative Study	First half of 1991	A visit to all or most of the participating countries after a questionnaire.	All participating countries fill in the questionnaire. Team of three to visit and write an evaluation report on the the success of of the activity.	Questionnaire followed by evaluation trip by team. During 1988-1990 countries continue formative evaluation.	Vast improvement in retention by the participating countries.

Programme Area: Universalization of primary education

Action programme: UPE/2. Education of the disadvantaged

In several countries of the Region, children who are not adequately served by the primary school system come from disadvantaged groups. While the definitions of such groups vary widely, in general, they include those residing in remote rural areas, in urban slums or belonging to cultural, ethnic and linguistic minorities, nomadic groups, refugees and physically handicapped.

In this project area, the major focus would be on the development of innovative schemes aiming at increasing enrolment and participation of disadvantaged groups and improving the contents and curriculum of education tailored to the environment and needs of children from disadvantaged and deprived population groups.

Specific Objectives

The overall aim is to assist Member States to develop more effective primary education programmes for the disadvantaged groups through the following objectives.

1. To promote research related to promotion of primary education for disadrantaged groups
2. To assist and support Member States to develop innovative schemes aimed at increasing educational opportunities for the disadvantaged groups.
3. To strengthen national capabitities in planning, management and development of programmes for disadvantaged groups.
4. To promote regional co-operation and exchange of knowledge and expertise.

Target groups

1. Groups identified as educationally disadvantaged such as
   - 1.1 population in rural and remote area, urban slums
   - 1.2 those belonging to cultural, ethic and linguistic minorities
   - 1.3 normadic groups
   - 1.4 refugees
   - 1.5 physically handicapped
2. Personnel involving in programme planning and implementation including policy and decision makers, researchers and evaluators, curriculum specialists.

Activities

See table on the following pages.

Expected Outcomes

Greater access and more relevant provision of primary education to disadvantaged groups through the following immediate outcomes:

1. Better understandings of factors related to education of the disadvantaged.
2. More innovative educational strategies in the provision of education for the disadvantaged.

3. More effective national capabilities for planning, management and development of programmes for disadvantaged groups.
4. Closer regional co-operation and more effective exchange of information and experiences.

Monitoring and Evaluation

1. Regular assessment of access of specific disadvantaged groups to primary education.
2. Evaluation of specific programmes for disadvantaged groups.
3. Assessment of understanding and competencies of key national personnel involved in providing education for disadvantaged groups.
4. Assessment of regional co-operation and exchange.

Activities (UPE/2)

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
UPE/2.1	National studies focused on provision of primary education for the disadvantaged (these residing in remote and rural areas, urban slums or belonging to cultural, ethnic and linguistic minorities, nomadic groups, refugees and physically handicapped) and their educational needs.	8-10 months	Formulation of Research Teams of Training specialists at the national level	Specialists and policy makers and researchers in primary education and education of disadvantaged groups.	Set up objectives for the studies and evaluate whether they have been met and how well by the Research Team.	Reports of National Study
UPE/2.2	Regional and sub-regional workshop on education of the disadvantaged population groups. (The findings of the national studies will be the basis of these workshops).	12-14 days	Critical examination and review of national studies and exchange of experiences	Policy makers and specialists involved in the education of disadvantaged groups.	Followup for Develpment of national plan	a. Report of the workshop b. National Follow-up plan
UPE/2.3	Regional and national training workshops for development of teacher training and curriculum (Teaching/ Learning) strategies and methodologies focused on multiple class and large class teaching in rural, remote, isolated and sparsely populated areas.	Regional: 16-18 days National: 16-18 days	a. Exchange of expereinces available on the subject. b. Development of guidelines and handbook (R) c. Development of handbook and guidelines (N).	Teacher educations and curriculum specialists	a. Follow-up national workshops b. Production of handbooks and guidelines c. Integrate with Teacher Training and Curriculum Development	a. Report of the workshop(s) b. Follow-up National Plans c. Guidelines and handbooks.
UPE/2.4	Inter country study visits for exchange of experiences on education of disadvantaged groups in rural, mountainous, isolated and sparsely populated areas.	2-3 weeks	a. Visit actual project sites b. Consult with specialists and national officials c. Prepare critical individual assessments	Policy level personnel and specialists involved in the education of disadvantaged groups	Follow-up national discussion groups to disseminate the experience gained and report to ACEID on the outcomes	– Individual assessment reports on the visit – Country report on how the experience of the region will be utilized.

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
UPE/2.5	Research studies on: (a) Socio-emotional factors (Familial, school and community related) Affecting school learning among disadvantaged children. (b) Study on early competencies affecting learning of disadvantaged children.	One year	Constitute two specialist teams for the study and research	Research specialists, curriculum developers, teacher training and selected teachers.	To be monitored by the National Research Team(s)	Report of the two studies
UPE/2.6	Regional and national workshops for development for Pre-school enrichment packages and supplementary enrichment learning materials with particular focus on early years of primary schooling	10-12 days	Utilizing the findings of the two studies under 5, the Regional Meeting will develop guidelines for developing enrichment packages and supplementary learning materials for early years of primary schooling. The national workshops will develop the materials.	Primary education specialists including curriculum developers, teacher trainers, and teacher and child development specialists	Follow-up National Workshop for development of materials.	– Regional guidelines – Enrichments and supplementary learning materials at national and local levels.
UPE/2.7	Subregional and national training workshops on development of low-cost and teacher made instructional aids.	10-12 days	The subregional workshop will utilize the existing experiences of the countries and develop a handbook for national workshops. The national workshop will develop materials and handbook for teachers.	Curriculum specialists and teachers involved in the development of teaching materials and aids.	National follow-up workshops and development of handbooks for teachers	– Guidelines and handbooks for national workshops – Handbook for teachers
UPE/2.8	National workshops for development of work oriented primary education schemes for early school leavers (dropouts), those not completing primary school and working children.	15 days	Identify problems related to early school leavers (dropouts) and analyze the findings of researches and studies available on item and review the programmes already ongoing. Develop work oriented primary education. Keeping in view the educational and societal needs of working children.	Specialists in primary education, work oriented education and specialists from non-governmental organizations devoted to education and welfare of children	Launching of pilot and large scale projects	Work oriented primary education schemes

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
UPE/2.9	Subregional workshop on educational mathods and strategies for education of migrants and nomadic groups	10-12 days	Preparation of case studies by each participant country. The workshop will examine important and crucial aspects relating to curriculum and teacher in education of nomadic and migrant groups.	Specialists involved in the education of nomadic and migrant groups.	Follow-up actions taken in the countries	Report of the Workshop
UPE/2.10	National workshops on development of part-time and extended primary education schemes combined with self learning packages including the use of mass media especially of ratio broadcasting and other print media.	15 days	Identify problems related to early school leavers (dropouts) and analyze the findings of researchers and studies availble on item and review the programmes already ongoing. Develop work oriented primary education. Keeping in view the educational and societal needs of working children.	Specialists in primary education, work oriented education and specialists from non-governmental organizations devoted to education and welfare of children	Launching of pilot and large scale projects	Work oriented primary education schemes
UPE/2.11	National Workshop to integrate efforts of all governmental agencies such as Education, Social Welfare, Health and NGO's (including charitable institutions) engaged in the provision and improvement of services for disabled children. The workshop should focus on 1. Parent counselling and public education in order to grant equitable place in the community and to maximise educational opprotunities for these children.	10 days	– Share expertise and experience – Develop strategies and material. – Organize for dissemination	Key persons in the agencies concerned. Special Education training staff. Instructional material developers. Representatives of i) local grass-root level agencies; ii) community workers; iii) parents; iv) media.	Evaluate material produced. Follow-up implementation at sub-national and local levels. Prepare plan for workshop.	Produce integrated plan of action. Increased awareness through use of media. Increased parent/community participation in the education of the disabled Plan for national workshop to prepare training materials and training programmes.

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
UPE/2.12	National workshop to prepare programmes and training material for multi-purpose workers, regular teacher, health aids, etc.	6-8 days	– Study available material in different agencies. – Develop material	– Training staff from different agencies; – Instructional material development.	Monitor progress of sub-national training workshops.	Utilization expertise and experience of all agencies concerned.
UPE/2.13	National workshop for teacher education and in-service education personnel to incorporate components of special education in regular teacher education so as to – facilitate detection of disabled children; – stimulate attitude change; – understand levels of disabilities; – cater for different levels of disabled children in the classroom, specially those at the primary level. – help integrate such children to regular classroom. – assist in early detection of disabilities among pre-schoolers in the community.	6-8 days	1. Assess needs and constraints; 2. develop material for teacher education and in-service education. 3. develop teachniques to monitor and evaluate teacher involvement. 4. Field visit to institution for disabled children.	Staff involved in developing teacher education and in-service education programmes. Specialists in special education Instructional material developers.	Report of progress of training programmes. Follow-up outcomes of training programmes. Follow-up teacher involvement and concern.	Packages for in-service Utilization in local level training programmes. Increased teacher concern and involvement in children with disabilities. Willingness to assist such children directly or by directing the parents to proper source of assistance. Involvement in parent, community education programmes.
UPE/2.14	National Workshop on Special Education to: 1. develop curriculum material; 2. adopt curricular material; 3. make realistic assessment of needs and resources.	2 months	– Examine existing curricular material. – Carry out studies on the relevance. – Examine material developed in other countries. – Develop local material. – Examine needs and resources available.	Specialists in special education.	Monitor progress of workshops	– Report of studies on existing curricular material. – Production of new curricular material. – An inventory of needs and resources.

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
UPE/2.15	Sub-national workshops for implementing new curricular material.	6-12 months	Workshops for new curricular.	Personnel involved at sub-national level.	Monitor and evaluate implementation.	Studies and reports of implementation.
UPE/2.16	National Workshop to develop low-cost technology and aids.	3-6 months	– Study of needs and availability of material and expertise. – Develop material. – Yield trails (limited).	Special Education specialists. Technicians.	Monitor Evaluate use of aids.	Report of present position. Low-cost technology aids.
UPE/2.17	Sub-regional workshop to develop low-cost technology and aids.	3-6 months	– Identify countries. – Select aids to be developed. – Develop aids. – Produce, distribute for national utilization.	Specialists from selected countries.	Monitor Evaluate use of aids.	Production of low-cost technology aids.

Programme area: Universalization of primary education

Action programme: UPE/3. Improvement of the quality of primary education

Universalization of primary education is concerned not only with the access of every primary school age child to school but also with the quality of education he/she is to receive. This sub-programme area will focus on the development of educational programmes, methods and materials for improving achievement levels of primary school students and for insuring that they are adequately prepared for life.

Specific Objectives

Improvement of the quality of primary education will be achieved through the following specific objectives:

1. To enhance awareness and concern for the problem of quality of education in the pressure for qualitation expansion of the school system;
2. To promote research and studies in the area of quality improvement, relevancy and pupils' achievement;
3. To facilitate improvement of curricula for greater relevancy and better pupils achievements;
4. To support development and implementation of innovative and more effective instructional strategies;
5. To promote development of appropriate learning materials;
6. To enhance national capabilities in curriculum and material development, training of teachers and educational personnel monitoring and evaluation;
7. To encourage regional co-operation and exchange of knowledge and experiences in the field.

Target Groups

1. Personnel involved in the provision of primary education and quality improvement such as curriculum specialists, materials development specialists, trainers of instructors, researchers.
2. Primary school students with emphasis on students with learning disabilities and those from disadvantaged backgrounds.

Activities

See table on the following pages.

Expected Outcomes

1. Greater concern and understanding for improvement of quality of primary education;
2. Improved achievement levels of pupils;
3. More relevant curriculum and more appropriate learning materials;
4. More effective learning strategies;

5. Better trained personnel at the national levels to plan and implement measures aiming at improving quality of primary education;
6. More effective regional co-operation and exchange.

Monitoring and Evaluation

1. Regular assessment of students achievement
2. Evaluation of curricula, learning strategies and learning materials
3. Evaluation of competencies and anderstanding of key national personnel concerning improvement of quality of primary education.

Activities (UPE/3)

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
UPE/3.1	Curriculum Renewal and Integration/ Introduction of new subjects like Education for Better Health and Nutrition, Moral and Values Education, Environment Education.			Curriculum specialists Teacher educators Media specialists Educational administrators Supervisors Teachers Community leaders	Monitoring mechanism to be set up at national level Monitoring by collecting reports, visits to Member States, holding subregional and regional seminars	– Integrated primary school curriculum. – New curricula for "Education for Better Health" and values education and environment education.
	– Continuing support for national efforts in designing integrated curriculum, redesigning curriculum to meet rural needs, introducing new subjects like "Education for Better Health and Nutrition", preparing and producing of curriculum and teaching guides.	Continuous	– Regional workshop – Consultations – Inter-country study-visits			
	– Sub-regional and regional seminars for sharing of experiences in curriculum renewal and integration.	1-2 weeks (each)	Seminars			
	– Development of programmes and materials for training curriculum specialist.	4 weeks	Workshop			

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
UPE/3.2	Development of Innovative Instructional Strategies like Multiple class Teaching and Diagnostic Teaching – Meeting of regional experts to identify and elaborate on innovative instruction. – Technical group meetings on development of materials and methods of diagnostic instruction at regional and sub-regional level. – Training of key national personnel in instructional technology and in adopting innovative strategies at the national level. – Support for the production of materials and teaching guides to facilitate the implementation of innovative strategies. – Pilot study of these materials and methods in selected countries. – Regional and sub-regional seminars for sharing experiences in the fuse of innovative instructional strategies; – Inter-country visits to observe the implementation of various strategies.	3 weeks 4 weeks (each) 1-2 months Continuous 1 year 1-2 weeks (each) 1-2 months	Regional workshops Regional/Sub-regional meeting Identifying lead institute at the national level, and the organization of training, production and pilot study through these institutions, including mobile teams and study visits Seminar Attachments	Teacher educators Supervisors Selected teachers Specialists in instructional/educational technology	Monitoring at the regional level.	A set of materials and methods for multiple class teaching and diagnostic teaching. – A cadre of trained personnel in instructional technology. – Reports on the implementation and effectiveness of various strategies.
UPE/3.3	Development of Teaching and Learning Materials including Textbooks – Technical group meetings at regional and sub-regional levels on improvement of the quality of textbooks. – Support for production of quality textbooks at the national level.	2 weeks (each) Continuous	Workshop Seminars	Textbook writers and illustrators Production personnel Instructional media specialists, Audio visual people Supervisors Teachers	At the regional level	Manual on the production of quality textbooks. Sets of teaching/learning materials for primary school. A cadre of trained personnel at the national level.

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
	– Regional experts meeting on identifying teaching learning materials geared toward raising achievement levels of children.	1-2 weeks	Seminars including mobile teams and study visits.			
	– Technical workshops at regional and sub-regional levels on the development and production of teaching learning materials.	4 weeks (each)	Technical workshops			
	– Training of key personnel at the national level on the design, development and production of teaching learning materials.	1-2 months	To be undertaken by lead institution			
	– Inter-country exchange of materials and expertise.	Continuous	Attachments			
UPE/3.4	Preparation of educational personnel (lower primary teachers, head-teachers and primary school supervisors)			Teacher educators Supervisors	– At the regional level	– Training manuals and guides
	– Technical group meetings at regional and sub-regional levels for the development of programmes and materials for in-service preparation of teachers and other personnel to perform new roles such as diagnostic teaching and locally producing instructional materials:	1-2 weeks	Regional seminars		– Monitoring of the functioning of mobile training teams and case studies at the national level.	– Case study reports
	– Training mobile teams for school based in-service education	1 month	Regional/sub-regional training programme.			
	– Case studies on the management and affectiveness of various modes of in-service education	1 year	National teams to undertake case studies and disseminate finding.			
	– Dissemination of information from case studies	6 months				

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
UPE/3.5	Special Studies and Joint Innovative Project on Raising Pupils' Achievement Level – Seminars to review pupils' achievement of the primary school both at the regional and national levels. – Experimental pilot study, including workshop meeting to raise pupils' achievement especially at the early stage of primary education in related educational quality including evaluation of pupils' learning. – Joint study on the determinants of achievement of primary school children.	1-2 weeks (each) 2 years 1 year	Seminars including mobile teams and study visits Formation of national teams. Design and development meetings at regional level Formation of national teams to conduct the study	a. Regional level – Representative of participating countries especially those who involved in this research project b. National level – Educational administrators – Curriculum specialist – Teacher educators – Supervisors – Teachers	Monitoring by collecting reports, visits to Member States, holding regional and national seminars.	– Improved relationship between community and school in related to preparation of children for school. – Improved method of instruction including teaching and learning materials – Improved techniques of supervision – Improved pupils' achievement – Reports on determinants of achievement at primary school level
UPE/3.6	(a) Inventories of current health and nutrition education to be prepared by curriculum units of the Member States	Jan.-June '87	Usual work and special needing	Curriculum officers	Prepare set of objectives for the inventories, were they met and how well?	Inventories
	(b) National workshops to define after the studies what the counting has in this field and what it still needs.	July/Aug. '87 one week	Workshop to be held in-country	Subject advisory committee. Some parent and community representation	Set of objectives to be prepared. Were they met? How well?	Definition of what the countries need and what they lack.
	(c) Sub-regional workshop to discuss reports of national workshops and to develop teaching materials to be used in the Pacific.	October 1987 10 days	Workshop 10 days	One or representatives from each State, some expert identified by Unesco	Objectives must be set. Where they met? How well?	A core of common material developed and taken back to countries for trial.
	(d) Follow-up workshop to prepare final material and produce an in-service package for teachers	October 1988 10 days	Workshop 10 days	Same participants as previous year. Mobile team with in-service expertise.	Objectives to be set. Were they met? How well?	Final teaching materials produced. An in-service package for teachers produced.
	(e) Use of materials	Continuing use of material prepared. Continuing	Formal work in countries in schools	Pupils and teachers in schools	Country evaluation unit to study the value of the materials	Improved health and nutrition

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
	(f) Evaluative study	First half of 1991	Questionnaire prepared by ACEID and replies collated by ACEID	Each of the Member States	Questionnaire During the period countries continue formative evaluation	Improved health and nutrition
UPE/3.7	Education Resource Centres (a) A national study group A study group to review • training of supervisors and resource centre staff • lack in training • what their roles and duties are?	Three to four days April 1987	A study group	National ministry personnel	Prepare a set of objectives. Were they met and how well?	A report listing what is done, what needs to be done and what he expected roles are?
	(b) Sub-regional workshops A workshop to develop training programmes for these officers after discussion of the national studies	Two weeks June/July 1987	A workshop	Two persons from each participating country.	Prepare a set of objectives. Were they met and how well? Each attended to fill in a prepared questionnaire. As to the realistic nature of the workshop.	Two programmes: one for training professional staff supervisors and one for training resource centre personnel.
	(c) National workshops to implement the training programmes produced at the sub-regional workshops.	One or two weeks Continuing	Training workshops in-country	Over the 1988-1991 period as many supervisors and resources centre personnel as possible	Questionnaire to be filled in by participants.	More confident officers more competent to carry their duties.
	(d) Review and evaluation	1991	Questionnaire followed by an evaluation team.	Team nominated by ACEID	Questionnaire to be filled in and then collated. Team must compare 1991 situation as against the studies prepared in 1987.	Better work done by supervisors and resource centre personnel resulting in better teaching in schools and an improved quality of education.

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
UPE/3.8	**Multiple Grade Teaching**					
	(a) National workshops to identity the extent of multi-grade teaching and the problems and causes in the country	one week April/May '87	• A workshop • Team to be appointed in-country	Teacher educators Professional supervisors National Department Officers	Prepare a set of objectives Were they met? How well?	A report showing the extent and also the problems that need addressing
	(b) Regional workshop to develop a training programme for teachers of multi-grade classes after consideration of national workshop reports.	one week July/Aug. '87	A workshop	One person from each country that held a national workshop	Prepare a set of objectives. Were they met? How well? Each participant to evaluate how well the workshop has met.	A training programme
	(c) Study tour of 3 countries engaged in multi-grade teacher education	three weeks late 1987	To insist centres engaged in such training	Some of the seminar participants	Set objectives and evaluate how well they have been met.	
	(d) National workshops using the prepared material to train teachers of multi-grade classes.	two weeks on-going during 1988-1991	Training workshops for teachers	Teachers of multi-grade classes		Better trained teachers and better teaching resulting in improved quality of education.
	(e) Review and evaluation	1991	Questionnaire followed by an evaluation team	Team nominated by ACEID	Questionnaire to be filled in and then summarized. Team must compare 1991 situation as against the 1987 national reports.	Improved quality of education.

Programme area: Universalization of primary education

Action programme: UPE/4. Planning and management of UPE at micro-level

Several countries in the region have had successful experiences in involving the local community in the provision of primary education. The local community can help to supplement the limited government's funding and resources, increase the relevancy of formal school curricula and extend primary education beyond the school's walls. Through their participation, the villagers develop, greater understanding of the education process, thereby becoming more supportive of their children education often, the villagers themselves also have opportunities to increase their competencies by being exposed to the sources of knowledge and information within the schools.

Involvement of local community in the provision of primary education, however, is often hampered by many factors. These are, inter alia, overcentralized planning and management processes absence of policy support for decentralized planning and management, inadequate infra-structure for micro-planning and management.

In this project area, emphasis will be given to developing strategies and methods of involving local communities and parents in the planning and management of primary education.

Objectives

1. To promote understanding and awareness among central policy-makers, planners and administrators about the need for decentralized planning and delegation of authority.
2. To support and facilitate the establishment of infrastructural base for micro-level planning and management.
3. To develop a training programme and organize training project to enhance knowledge and skill of personnel involved in micro-level planning and management.
4. To develop mechanism for collection of reliable data-base and other related statistical information.
5. To promote exchange of knowledge and information in the field.

Target groups

1. Mid-level related personnel including district and sub-district level education officials, planning officers, statisticians, head masters and other related officers from private and governmental agencies.
2. Representatives from local community and involved community leaders, school committee members and involved people in particular community.
3. High-level personnel involved in micro-level planning and management including administrators, planners, and policy-makers.

Activities

See table on the following pages.

Expected Outcomes

1. Greater understanding of the need for decentralized planning and delegation of authority in planning and management of primary education.
2. Enhanced national capabilities to trainned personnel in micro planning and to establish infra-structure for micro-planning.
3. More reliable data for planning and management of primary education at micro level.
4. More effective regional co-operation and exchange.

Monitoring and Evaluation

1. Assessment of national plan to set up micro-planning system for primary education.
2. Evaluation of progress in the establishment of micro-planning mechanisms for primary education and data base for planning.
3. Evaluation of the competencies of national personnel in conducting and in promoting micro-planning for primary education.
4. Assessment of regional exchange and co-operation.

Activities (UPE/4)

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
UPE/4.1	National conference to develop indicators needed to manage and plan UPE and to orient national policy-makers to the importance of micro-level planning and management	4 days	Conference	Officials in the MoE and other related persons both Govt. & non-govt. organization	a) Monitoring by MoE b) Evaluation by Govt. & the ROEAP	Development of indicators for effective planning and management at the micro-level and orientation of national policy-makers to these indicators
UPE/4.2	Joint study for the most effective management and planning model at the micro-level	1 year	Joint study	Senior researchers and educators	Constant monitoring is to be made by ROEAP to be followed by evaluation of the study by a Technical Working Group	A management and planning model at the micro-level will be developed to be adapted to the local situation of the adopting country.
UPE/4.3	Study visits across countries to study management and planning at the micro-level	2 weeks	Sub-regional study visit teams to be organized	Primary education personnel including administrators and involved community leaders and public representatives	ROEAP	Such study visits will contribute substantially on sharing experiences and apply them for further improvement of management and planning at the micro-level
UPE/4.4	Development of training/orientation programmes and materials (handbooks) for managers at the micro-level (district and sub-district education offices, supervisors, school management committee chairmen and members, headmasters, involved community leaders and elites, etc.)	one week for training programmes and 3 days for orientation programmes	Training and orientation programme	District and Sub-district level education officers, supervisors, head-masters for training programme and school committee chairmen and members and involved community leavers & elites for orientation programme.	By the Ministry of Education and the Directorate/Department of Primary Education	Educational personnel and others involved in the management and planning of administration will be oriented in the new techniques and management aspects of primary education at the micro level.

Programme area: Continuing education (CED)

Continuing education has become increasingly recognized as a critical contributing factor to the eradication of illiteracy and the provision of universal primary education.

Continuing education as discussed in this workplan will be broadly defined to cover all educational opportunities taken place outside the literacy and primary education programmes. Continuing education includes the enrichment of the learning environment to activate and sustain motivation for learning. It provides extra-curricular activities which further enhance the learning processes. It helps neo-literates to upgrade their literacy skills to attain permanent literacy. It caters to out-of-school population by providing lifelong learning opportunities which can be organized to further improve skills and competencies acquired through literacy and primary education programmes, or to provide equivalency alternative to formal education beyond primary levels or to assist the learners in work related activities and improvement of quality of life.

At present, some countries have given full support to the systematic provision of continuing education which are organized prior to and in conjunction with or after literacy and primary education programmes. Others have developed innovative approaches on a limited scale. Within the Region of Asia and Pacific, however, continuing education in its broader definition is a new and largely unexplored area. There remain to be unclear understanding about the roles and the nature of continuing education, questions of its economic feasibility especially at the times when intensive investments for EOI and UPE are called for and inadequate capabilities and mechanism to implement the concept in the diverse conditions of the Region.

Overall Aim

The programme in this area will aim at strengthening and supporting national efforts to plan and organize continuing education programmes to facilitate the eradication of illiteracy and the provision of universal primary education.

Specific Objectives

1. To propagate the need to provide continuing education as an integral component of the Education for All compaign;
2. To strengthen national capabilities in planning, management, curriculum and materials development, training and materials development, training and evaluation of continuing education programme;
3. To promote greater complementarity between formal and nonformal education as well as to mobilize the supports and commitments of the mass media; development agencies and the private sector in the provision of continuing education.
4. To support the improvement of on going programme and the development of new approaches in continuing education, with special emphasis to parental education, equivalency alternative to formal schooling and work-oriented continuing education activities;
5. To promote exchange of experiences and information in the provision of continuing education among countries within the Region.

Target Groups

1. Personnel involved in the provision of continuing education
   - 1.1 Personnel involved in literacy education primary education and continuing education.
   - 1.2 Mass Media
   - 1.3 Development Agencies
   - 1.4 Commercial and business sector
2. Recipients
   - 2.1 The illiterate population, literacy students, neo or semi-literates
   - 2.2 Parents of primary school students
   - 2.3 Primary school leavers

Action programmes

Action programmes identified as critical to the promotion of continuing education are as follows:

CED/1 Parental education

CED/2 Linkage between formal and non-formal education, and functional continuing education programmes

CED/3 Work-oriented continuing education

CED/4 Promotion of supportive learning environment

CED/5 Raising literacy levels and continuing education

Expected Outcomes

The project area aims to promote comprehensive continuing education programmes through the following outcomes

1. Greater recognition of and commitment to the need to provide continuing education;
2. More competent national capabilities and infra-structure to plan and organize continuing education;
3. Development of more effective approaches in the provision of continuing education;
4. Closer regional co-operation and sharing of experiences in the field.

Monitoring and Evaluation

1. Evaluation of polices, plans and the system for provision of continuing education as well as evaluation of specific programmes;
2. Evaluation of national capabilities and infra-structures in planning and organizing continuing education programmes;
3. Assessment of the development of new and more effective approaches to continuing education;
4. Assessment of regional co-operation.

Programme area: Continuing education (CED)

Action programme: CED/1 Parental education

Experience has demonstrated that the expansion and improvement of primary education is not possible without the support and contributions of the community and, more particularly, the parents of children of school-going age. This programme area will focus special attention upon the education of the parents so that they could support and facilitate the education of their children. By introducing the parents to new developments in knowledge and pedagogy to enable them to help their children in their home work, it is expected that the parents will also update their own knowledge base and derive benefits for themselves through such an exposure.

Specific Objectives

1. To promote favourable climate for the promotion of parental education.
2. To support innovative programmes and learning materials for parental education.
3. To offer training opportunities and exchange of experience to enhance the capabilities of personnel responsible for parental education.

Target Groups

Parents of pre-primary and primary school-age children.

Activity

See table on the following pages.

Expected Outcomes

1. Grater understanding and support for the provision of parental education;
2. Development of strategies for promotion of parental education at national level;
3. More trainned personnel at the national level to function as trainers to other primary education personnel;
4. More effective regional co-operation and sharing of knowledge.

Monitoring and Evaluation

1. Assessment of knowledge and understanding of the need for and the strategies in organizing parental education among pre-primary and primary school personnel.
2. Evaluation of the national policies, plans and programmes in parental education.

Activities (CED/1)

No	*Activity Title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
CED/1.1	Survey of training needs, resources and methodologies on Parent Education.	Six months	National activity, research	Educational researchers, health & social workers parents teachers	Regular monitoring of progress on key target dates, evaluation of research, results as to comprehensiveness.	Research report describing training needs, resources available, and methodologies.
CED/1.2	Sub-regional training workshop on materials development	15 days	Field Operation Workshop	Select target groups in national project teams and representative of parents from host country.	Evaluation of prototype training materials produced, including, their validation and trials.	– Teams of trained personnel. – Prototype materials and improved methodologies.
CED/1.3	Follow-up national workshops	Two weeks (three workshops)	Training Workshops	Project staff and representatives of parent groups	End of workshop evaluation.	– Trained project staff; – Sets of materials adapted.
CED/1.4	Launching national programme on parent education.	Continuing	Dissemination of knowledge through national campaign.	Families	Periodic reviews	– Improved parental consciousness and family support for education. – Better understanding about roles of family members.

Programme area: Continuing education

Action programme: CED/2. Linkage between formal and non-formal education, and functional continuing education programmes

In attempting to provide continuing education for primary school leavers and neo-literates, it is important to recognize that there are at present a large number out-of-school children and youths who cannot be brought back in to the school system for reasons such as poverty, family and work obligations or simply limited capacities of the schools to accomodate them. Yet these children and youth need educational opportunities to upgrade their campetencies as well as formal credentials for their knowledge and skills so that they will not be at a disadvantage in the world of works.

Equivalency and functional continuing education, is therefore needed to complement formal education so that the out-of-school children and youth population will have access to flexible and quality education to become more skillful, productive and socially responsible.

Specific Objectives

1. To encourage recognition for the need to achieve complementarity between formal and non-formal education, particularly in providing equivalency and functional continuing education programmes;
2. To support the development of programmes which will enable learners to progress through the educational systems through complementary formal and non-formal education alternatives;
3. To explore ways in which accreditation for non-formal courses can be obtained as well as ways in which knowledge and experiences can be transferred between formal and non-formal education curricula.
4. To strengthen national capabilities in developing approaches, currcula and learning materials for equivalency non-gormal education;
5. To promote sharing of knowledge and experiences in the field.

Target Groups

- Policy makers, planners, high level administrators specialists in formal and non-formal education.
- Primary school leavers and neo-literates, particularly those within youth ages.

Activities

See table on the following pages.

Expected Outcomes

1. More recognition and support for equivalency and functional continuing education in development plan;
2. Development and improvement of more effective in providing equivalency continuing education and in transferring learning experiences between formal and non-formal systems;

3. Strengthened national capabilities in programmes planning and management;
4. Closer linkages and more complementarity between formal and non-formal education;
5. More effective regional co-operation and exchange of knowledge and information.

Monitoring and Evaluation

1. Analysis of policy, plans and participation of governmental and non-governmental agencies in providing equivalency continuing education and in promoting linkages between formal and non-formal education.
2. Evaluation of equivalency continuing education programmes particularly in terms of their accessibility, their relevancy and suitability to the neo-literates and primary school leavers.
3. Assessment of regional co-operation.

Activities (CED/2)

No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Monitoring and Evaluation*	*Expected Outcome*
	A. School leavers:	1 week	Technical Working Group	Experienced Non-formal Practitioners	Workshop evaluation	Methodologies case studies, synthesis of experiences. Guidelines for materials.
CED/2.1	Exchange of experiences					
CED/2.2	In-country workshops	3+, each 1 month	Mobile Workshop	Team: ex-TWG Local members all categories	Team reports Local evaluation	Applications Modelling behaviour. Non-formal materials for school leavers.
	B. Referred to national bodies					
	C. Referred to ROEAP Planning/ Administration operation.					
	D. Accreditation:					
CED/2.3	1. Regional meeting of Experts on qualifications and credentials at various levels.	1 week	Technical Working Group	Senior officials involved in accreditation, from awarding institutions and professional bodies; senior educators, formal and non-formal, which provide courses.	In-built evaluation	Recommendations regarding comparability of awards and transfer between formal and non-formal sectors.
CED/2.4	2. National seminar	1 week	Follow-up Seminar	National group composed as above	In-built evaluation	National-level recommendations about common elements of curriculum, examining, credit.
CED/2.5	3. National meetings of executive officials	3 days	Review and adoption of recommendations	Policy and decision making officials	Public and professional response	Decisions about credit recognition, common elements of curriculum.

Programme Area: Continuing education

Action programme: CED/3. Work-oriented continuing education

Meaningful continuing education links education with productive work. Such an approach provides an effective incentive for neo-literates and primary school leavers to continue their education. It helps the learners to make the difficult transition between education and the world of works as well as to upgrade their campetencies while in the work force. In countries where resources for education are limited, the approach helps to mobilize other development agencies and the private sector to take active part in providing continuing education.

Several attempts have been made to link education with productive work. Curricula have been functionalized to deal with work-related issues. Production activities have been sandwiched with school activities. Courses have been offered on work, sites for employees.

In this area emphasis will be on further increasing opportunities for application of education for development and productivities.

Specific Objectives

1. To create awareness and appreciation for the need for work oriented continuing education;
2. To develop national capiabilities for planning and implementing of work related educational programmes;
3. To explore ways in which effective linkages can be established between educational activities and productive work;
4. To promote inter-agency co-operation and co-ordination for work related continuing education and programmes;
5. To promote exchange of information, expertise and experiences at various levels.

Target Groups

Organizers of the activities such as representatives from different development organizations, the industries and the trade unions.

Neo-literates and primary school leavers particalarly the out-of-school youth.

Activities

See tables on the following pages.

Expected Outcomes

1. More recognition of and more support for work-oriented continuing education among policy makers, development agencies, the industries, the trade unions and the commercial sector;
2. Development and improvement of strategies and approaches for provision of work-oriented continuing education;

3. Strengthened national capabilities to plan implement and evaluate work-oriented continuing education programmes;
4. More effective regional co-operation and sharing of knowledge and experiences.

Monitoring and Evaluation

1. Evaluation of work-oriented continuing education programmes;
2. Analysis of national policies and participation of various government and non-governmental agencies for work-oriented continuing education programmes;
3. Analysis of regional co-operation and sharing of knowledge and experiences.

Activities (CED/3)

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
CED/3.1	National policy planning and co-ordination	one week	National Meeting	Senior administrators from Education, Labour, Agriculture, Rural Development and other related agencies/organizations		– Policy formulation and guidelines for planning. – Outline of co-ordination mechanism.
CED/3.2	Linkages between education and work	2 years	8 National case studies	National experts/ Institutions		Analysis of national situation on education and work and direction for future action.
CED/3.3	Linkages between education and work	one week	Regional and sub-regional seminars	Education planners, curriculum developers, industrial managers.		– Inter-country experience – Modalities for enhancing linkages between education and work. – Outline of national follow-up seminar plan
CED/3.4	National follow-up seminar on linkages between education and work	one week	Seminar	Representatives of key organizations engaged in linking education and work.		National plan for linking education and work along with clearly defined roles of participating agencies.
CED/3/5	Joint innovative project linking education with productive work	two weeks	i) Sub-regional Planning meeting ii) Research iii) National level execution	i) Country experts and Unesco staff ii) Country experts	– Mid-term Project Review – Summative evaluation	i) An inter-country project proposal ii) Modalities of better linkages between education and productive work.
CED/3.6	Formulation of projects on education and work	continuing	Advisory services	Educational planners and Unesco advisers		Project proposals
CED/3.7	Sub-regional training workshop for trainers	two weeks	Workshop	Key project personnel		Team of key trained person in each country

No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
CED/3.8	Follow-up national training	two weeks	Workshop	Field staff		Trained field workers/teachers
CED/3.9	Inter-country mobile training	three weeks	Study visits and observations tours	Key project personnel		(i) Trained key personnel (ii) Sharing of experiences report
CED/3.10	On the job training courses	one month	Attachment	Project operational staff		Trained project personnel
CED/3.11	Sub-regional workshop for curriculum and materials development	three weeks	Workshop	Project personnel		– Sets of training and teaching learning materials – Teams of trained project staff
CED/3.12	Follow-up national workshop on curriculum and materials development	ten days	Workshop	Materials Development Specialists		– Sets of training and teaching learning materials. – Teams of trained person in materials development.
CED/3.13	Inter-project exchange of expertise and experiences	continuing	Personnel exchange Regional	Experts at national levels	Review of experts contribution	Development of new projects, materials and training programmes
CED/3.14	Development of Manual on monitoring and evaluation techniques and appropriate instruments	6-12 months	Planning Meeting Manual Development	Expert group from countries having literacy, UPE and continuing education programme	–	A manual on monitoring and evaluation
CED/3.15	Launching of follow-up national projects	3 years	–	National project authorities	Mid-term review and evaluation	1. Enhanced productivity of worker 2. Better workmanship 3. Improved relationship between Ed. & work.

Programme area: Continuing education

Action programme: CED/4. Creating supportive learning environment

It is now widely recognized that supportive literate environment plays a critical role in the eradication of illiteracy and the provision of universal primary education. The availability of relevant and interesting reading materials helps to develop motivation to learn to read and write, provides opportunity to further develop literacy skills and serves as a link between educational activities and improvement in the quality of life.

At present, however, attempts to enrich the rural environment with reading materials are often seen as services to be provided only at the completion of literacy campaign. Consequently, most rural communities suffer from insufficient reading materials to facilitate their literacy and primary school activities.

Specific Objectives

1. To promote awareness among policy makers of the needs to provide continuing education and to create supportive learning environment as a means to achieve and permanently ensure EOI and UPE;
2. Integrate continuing education into the planning and implementation of eradication of illiteracy and universalization of primary education;
3. Develop and further strengthen national efforts to enrich the literate environment;
4. Promote apprectiation of literacy and spirit of enquiry among the public;
5. Mobilize the support of governmental agencies, the mass media, the private sector and the general public in taking the responsibility in providing continuing education and enriching learning environment.

Target Groups

1. Policy makers including educational planners and administrator
2. The mass media including folk artists
3. The general public with emphasis on the target groups of UPE and EOI and those directly influence their decisions.

Activities

See table on the following pages.

Expected Outcomes

1. Greater recognition of the need to enrich the literate environment to become more supportive to the goals of APPEAL;
2. More supportive policies and plans for continuing education and promotion of literate environment;
3. Greater capabilities among key national personnel to enrich the literate environment;
4. More involvement among government and non-government as well as the mass media in organizing programmes to promote the literate environment;
5. More effective regional co-operation and sharing of knowledge and experiences.

Monitoring and Evaluation

1. Analysis of national policies and plans;
2. Assessment of opinions and concerns for supportive literate environment among key educators;
3. Evaluation of national programmes;
4. Assessment of the accessibility to the relevant reading materials and other supportive learning materials among the target groups of APPEAL;
5. Assessment of regional co-operation and sharing of knowledge and information.

Activities: (CED/4)

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
CED/4.1	Comparative Study on Innovations and their impacts in Continuing Education	1½ years – 1 year for national study – 6 months for comparative analysis at the regional level	– national studies – camparative analysis at the regional level – Regional seminar to present the findings	– National study will be conducted by national researchers according to the guidelines developed by ROEAP. – Seminar will be attended by researchers and policy makers.	– Progress report during the study – Follow up on the extent to which the Seminar has contributed to changes in policy and plans concerning CE.	Reserach Report providing information for policy formulation, planning, for creating public awareness.
CED/4.2	National seminar on Continuing Education.	5 days	Seminar	1. Policy makers 2. Planners 3. Top level administrator from NGO's and Mass Media.		1. Increased awareness and commitment towards CE. 2. Guidelines for integration of Continuing Education into future planning and implementation
CED/4.3	Sub-national planning workshops for integrating continuing education into EOI and UPE	6 days	Operational workshop	1. Planners from agencies concerned with UPE, EOI and key governmental and non-governmental agencies.		An integrated plan of UPE, EOI and Continuing Education

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
	Campaign to create public awareness					
CED/4.4	Regional Campaign to promote awareness and concerns for the provision of CE and the enrichment of learning environment.	1 year	– public addresses by leading national figures – production of regional motivational materials such as video tapes for region wide broadcasting – Visits by leading folk artists from the countries within the region to promote the campaign	– National leaders – Mass media and communication specialists – Flok artist	Periodic review and end of the campaign evaluation.	Increased concern and commitment to EOI, UPE and CE as integral part of lifelong learning system
CED/4.5	Seminar on the Roles of Mass Media in CE	3-5 days	Seminar	1. Mass media and folk artists. 2. Literacy and UPE specialists.		1. More aware mass media and folk artists. 2. Formulation of strategies for CE
CED/4.6	Development of motivational materials	5-10 days	Operational workshop	1. Advertising media artists. 2. Folk artists. 3. CE personnel.		Motivational materials for nationwide distribution.
CED/4.7	Production and Dissemination of motivational materials	Periodically	1. Mass Media. 2. Presentation by personalities	1. The mass media 2. Select team of personalities.	Audience research	1. Sets of motivation of materials for the public. 2. Increased public awareness.

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
CED/4.8	Local campaign activities adapted to the local cultural and informal learning system.	Periodically	1. Local Reading Centres. 2. Book Donations. 3. Literacy Contests. 4. Other forms of promotional activities.	1. Representatives from agencies related to UPE and EOI. 2. Key community leaders/organizers. 3. Representatives of relevant governmental agencies.		1. Donations in forms of reading materials, funds, etc. 2. The public's increased appreciation of reading.
CED/4.9	National study to identify existing mechanism for production and distribution of reading materials and suggestions of improvement.	1 year	Research	Researchers in conjunction with CE personnel.		1. Study report bringing out existing mechanisms on production and distribution of reading materials. 2. Guidelines for future activities.
CED/4.10	Joint innovative projects on development production and distribution of reading materials.	1 year	Experimental Project	1. CE, UPE, EOI personnel 2. NGO's 3. Other Development Governmental Agencies. 4. Commercial Book Publishers		1. Models for improving the quality of reading materials and for extending distribution network into the rural communities. 2. Prototypes materials extended. 3. Distribution of reading materials to communities lacking such facilities.
CED/4.11	Regional training courses on the following topics – planning and organizing CE – Utilization of Mass Media and Folk Media in CE – Production of motivational materials, and locally relevant materials.	2 weeks	Training workshop for trainers	1. Planners and personnel with previous experiences CE in UPE, EOI and 2. Communication specialists	Follow-up after the completion of training programmes.	1. Increased competency at the national levels for planning, material production and the use of mass media in CE. 2. Prototype materials. 3. Tentative national plans.

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
CED/4.12	Strengthening of infrastructures to sustain the enrichment of the learning environment.	Continuous	– Establishment of nation-wide network of libraries, reading centres or other forms of resource/information centres. – Training of village leaders, UPE and EOI personnel to organize and support such infrastructure.	1. Village leaders 2. EOI & UPE personnels 3. GO and NGO's concerned.		More effective infrastructure for enrich most of the learning environment.

Programme area: Continuing education

Action programme: CED/5. Raising literacy levels and continuing education

Specific issues:

In most countries there are school drop-outs as well as primary school leavers who are unable to go to secondary schools. Many countries have launched programmes for raising literacy levels and contrinuing education for out-of-school populations, but much is to be done to improve and expand the programmes to serve societal needs.

Specific objectives:

1. To minimise a relapse into illiteracy
2. To increase the literacy skills of school leavers.

Target groups: All

Special considerations: –

Activities:

In the following page.

Expected Outcomes of sub-programme:

A raised level of literacy levels and an increased interest in continuing education.

Linkages:

1. Continuing Education
2. Improving quality of education

Activities (CED/5)

No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
CED/5.1	National studies to determine learning needs of drop outs and primary graduates who don't go to secondary level education and provisions in-country e.g. mobile literacy.	Six months	Discussion and working groups	Leading education administrators and teachers working in this area.	Objectives to be set. Have they been met and how?	A set of learning needs will be developed.
CED/5.2	Joint innovative projects at subregional level to develop and try out materials including software for media.	Continuing	Joint planning meeting and review	Participants of national studies	Objectives to be set.	Materials will be developed and finalized.
CED/5.3	National projects to meet the needs of continuing education i.g. agricultural, vocational.	Continuing	Needs assessment	Workers and teachers in this level of education.	Participants response and assessment	Series of projects will be developed. Pilot experimental schools could be developed.
CED/5.4	Dissemination of information from the national studies and the joint innovative studies.	Continuing	Obtain reports from Member Countries	ACEID or ROEAP	Feedback from Member States	
CED/5.5	Regional seminar to discuss the studies and projects.	1 week	Discussion plenary and groups	1 person from each participating country	Set objectives Were they met?	A set of needs to be met
CED/5.6	Training programmes (i) for materials development production (ii) for users and monitors of users of the above material	Continuing	Workshops and training courses	Teachers in member countries		Fully developed programmes and the development of materials

MAJOR PROGRAMME AREA: MAKING EDUCATION RELEVANT TO SOCIETAL REQUIREMENTS

Programme Area: Education for rural development (ERD)

Action programmes

ERD/1	–	Joint innovative project on education in and for rural development
ERD/2	–	Review of research studies on the major causes of educational under-development and effective strategies
ERD/3	–	Long-term planning and policy-making for educational innovation for integrated rural and urban development
ERD/4	–	Development of a curriculum suited to the special requirements of integrated rural development
ERD/5	–	The education of women and girls, disadvantaged groups, minorities, and out-of-school children and youth
ERD/6	–	Methods and content for training of teachers for rural areas and rural development

Programme area: Education and the world of work (EDW)

Action programmes

EDW/1	–	Research studies on education and work for identifying skilled manpower needs.
EDW/2	–	Joint Innovative Project on integrating education and work
EDW/3	–	Development and utilization of appropriate technologies for specific needs of small-scale economies
EDW/4	–	Improvement of methods, forms and structures of general, technical and vocational education
EDW/5	–	Development of physical facilities and exemplar instructional material for work education activities
EDW/6	–	Determining new directions in technical and vocational education reflecting the needs of newly emerging technologies

Programme area: Science and technology education including science for all (STE)

Action programmes

STE/1	–	Curriculum renewal – methods, materials and evaluation
STE/2	–	Developing competencies of science teachers and science teacher educators

STE/3 – Promoting and strengthening the design, prototype development, evaluation, maintenance, repair and effective use of science equipment with focus on low cost and teacher-made equipment

STE/4 – Promoting and strengthening the development of facilities for identification and nurturing of scientific and technological talent

STE/5 – Interaction of science, technology and society

STE/6 – Development of learning/teaching and training materials for use in extension programmes for developing science and technology literacy and public understanding of science and technology

STE/7 – Development and strengthening of delivery systems for out-of-school target groups through training of personnel for out-of-school scientific activities and mobilization of expertise and resources

Programme area: Education for the future and futures studies (EDF)

Action programmes

EDF/1 – Futures' studies in education (1) (future scenario)

EDF/2 – Futures' studies in education (2) (translation into practice)

EDF/3 – Research and development of prototype materials at national level

EDF/4 – Development of curriculum suited to socio-economic and technological changes in the future

EDF/5 – Monitoring technological development and corresponding changes in curriculum and methods

Programme area: Restructuring secondary education (RSE)

Action programmes

RSE/1 – The development of alternative models to increase the relevance of secondary education responsive to societal requirements

RSE/2 – Joint Innovative Project on raising the quality of learning of secondary school students

Programme area: Morals and values education (MED)

Action programmes

MED/1 – Co-operative study on the morals/values taught at school and in the community

MED/2 – Co-operative study on the methods and materials/values education in formal and non-formal settings

MED/3 – Joint Innovative Project on evaluation methods in moral education

MED/4 – Research on cultural and arts materials to be used for moral and values education

Programme area: Special education (SED)

Action programmes

SED/1 – Special education for disabled children

SED/2 – Special education for gifted and talented children

MAJOR PROGRAMME AREA: MAKING EDUCATION RELEVANT TO SOCIETAL REQUIREMENTS

Rationale:

To be effective, education should serve both individual and societal needs. In countries where changes take place rapidly, it is important for policy makers and educational administrators to pay greater attention to the problems of making education relevant to societal conditions.

Current status:

The participants in the Regional Consultation Meeting agreed that effort should be concentrated on three major programme areas. Programme area II carried the title *Making education relevant to societal requirements.* Seven sub-programme areas were formulated under this major heading. The participants chose "requirements" rather the "needs" to indicate that it was time to focus on priorities for action and not merely to assess needs.

The changes that have occurred within society itself coupled with the conservatism of education systems has meant that social relevance as a goal has proved to be elusive. In addition, there has been a growing demand from parents, students and the general public for education to be related to prevailing conditions in the modern world. Therefore, the consultation meeting adopted the concept of social relevance as a criterion for the evaluation of educational systems, curriculum, and teaching methods in seven areas of educational innovation.

General issues:

Although social conditions will differ from one country to another, and from one cultural setting to another within a country, there are some societal factors which will need to be taken into account in all settings. These factors include the status of science and technology, the demographic pattern, the population size, the degree of isolation, the moral and religious values, the prevailing political ideas, the economic conditions, and the physical resources. When the goal adopted for education is improvement of social conditions, then it is necessary to forecast these factors which are contributing to such improvement. For the purposes of the 1987-1991 APEID Work Plan the time frame of this forecast will cover five years.

In addition, there is a need to develop scenarios for longer-term futures, with a view to understanding, controlling and creating the future.

Education for rural development

The products of rural peoples are still the economic mainstay of the majority of countries throughout the region, and there is a disproportionate incidence of problems of illiteracy and failure to complete schooling in rural areas. The educational problems of rural areas include difficulty of access, inequality of service in comparison with urban areas, low levels of literacy within communities as a whole and poverty.

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[1] The APEID publications in the series *Education and Polity* and the volume *Futures and Education* should be referred to in the context of this major programme area.

Some of the most intractable problems in education are found in rural areas, not least the question of which particular goal is relevant for the education of rural populations – education for rural occupations, education for those who live in rural areas, education to enable people to earn a living in urban areas, or education to enable people to migrate to other countries.

Education alone cannot raise living standards in the rural sector. Education must be linked to other disciplines and other forms of development in a total approach.

Education and work

There are common problems in many countries of the region in relating education to the world of work. The supply of skilled manpower for the developmental needs of the countries and the problem of unemployment demand that education and work should remain a major area of concern during the fourth programming cycle of APEID.

The major problems include the difficulty of access to appropriate technology, inadequate arrangements for the preparation and countinuous retraining of training personnel and teachers of technical subjects, lack of proper equipment and facilities, and lack of effective linkages between educational systems and agricultural and industrial enterprises.

In recent years, the definition of work has been broadened to include productive labour carried out inside or outside the home. The effect of this definition is that women's work has economic value.

More research is required in this field in order to provide adequate information on the vocationalization of general education and the relationship between education and the world of work.

Science and technology education

The last two decades have seen a remarkable change in the perception of developing countries of science and of education. There is a greater awareness and realization that applied science and technology are key factors in the modernization and industrialization process. It is therefore important that education in science (including technology and mathematics) begins as early as possible and is directed to all sections of the population. The preparation of teachers and materials for improving science education and extending scientific literacy to all sections of the population is therefore an urgent need to enable the applications of science and effective use of technologies in national development.

Considerable efforts have already been directed towards the improvement of science education in almost all APEID countries during the past two decades and many advances can be identified in the area of curriculum development, development of instructional materials, training of teachers, and other aspects of education. However, the majority of these efforts have mainly been confined to the formal school system with the result that a sizable population of out-of-school children and a large population of adults have had little chance of developing a minimum level of scientific literacy and appreciation of the potentialities of science and technology for improving their living conditions.

Education for the future and futures studies

The rate of change has produced a worldwide interest in the future not just to predict future changes but also to understand and influence those factors over which we have

some control. Futurology or the study of the future has implication for the future of education itself and for the relationships between educational goals and other social parameters.

Restructuring secondary education

Countries in the region have changing profiles in their school populations. There is universal primary education in many countries and approaching universalization of primary education in many others. An increasing number of countries have achieved universal secondary education. This has brought young people with a wider spread of ability into the schools of the region. A more diversified occupational structure and a greater scarcity of jobs has placed new demands on schools and has resulted in the unjustified charge that unemployment is a consequence of the educational level of the youthful population.

The increasing democratization of secondary education has both contributed to, and responded to, the aspirations of families and communities for their children to have the same access as other children both to school itself and to have the same opportunity to be taught those subjects with the greatest prestige. At the same time if there were no difference in the prestige accorded white collar jobs and manual activities, it might be better for national development.

The principle of equity is being extended to the education of girls and to the rights of minority ethnic groups. The issue of the rights of minority groups has in turn led to the requirement that schooling and school texts should be available in vernacular and in national languages.

Rising standards of education amongst populations have frequently resulted in the desire of parents to have closer contact with the shools their children attend; to know what goes on within them and to have some part in decisions made that will affect their children. This phenomenon has been accompanied by a recognition that families are on their own account, sources of learning and that, in addition, they have the capacity to be powerful reinforcing agents for the work of the school.

These changes in education have focused attention on secondary education and several countries of the region are introducing reforms in the structure, the curriculum and the assessment procedures used in secondary schools.

Morals and values education

The pace of change, the influence of the mass media and the different life experiences of older and younger population groups have all produced dislocations in traditional values and in many cases in the patterns of family life.

For achieving national development goals, strengthening national identify and maintaining desirable traditional values in an age of rapid changes in social as well as technological development, moral/religious/values education, whatever the course title may be at school, is given special attention in every society of the region. Increasing concern over the problems and issues of moral education have emerged as a consequence of national efforts to strengthen moral education.

Special education

While some advances in medical technology have reduced the incidence of disabling conditions, others have contributed to the survival of children who in earlier times would

have died at a young age. Therefore, the incidence of young people who need some kind of special education has remained much the same over the years.

The recognition of the rights of the disabled population to equal educational opportunities has led to a world-wide movement to integrate or "mainstream" children with disabilities into normal primary and secondary schools.

Summary

APEID, therefore, will carry out innovative studies and projects in the following seven areas for which the rationale has been briefly set out above.

1. Education for rural development (ERD)
2. Education for the world of work (EDW)
3. Science and technology education including science for all (STE)
4. Education for the future (EDF)
5. Restructuring secondary education (RSE)
6. Morals and values education (MED)
7. Special education (SED)

Overall aim

The emphasis on societal requirements rather than the more usual "societal needs" is to indicate that the overall aim is to develop innovative plans for action in education, which will have beneficial results for one or more aspects of social or economic development. The aim includes enhancing the relevance of the educational contribution to national developmental goals through providing access to relevant knowledge and understandings, skills and attitudes.

Specific objectives

To prepare programmes of work which lead to innovation in the seven sub-programme areas listed above.

To carry out sub-programmes under the headings (a) education for rural development; (b) education for the world of work, (c) science and technology education including science for all, (d) education for the future, (e) restructuring secondary education, (f) morals and values education, (g) special education with the aim of strengthening national capabilities.

Special considerations

In all programmes special consideration should be given to the circumstances and requirements of women and girls, disadvantaged populations, culturally different populations, rural populations, and states with small populations (e.g. island states), countries with different ecologies, sub-cultures, languages, traditions and values.

Expected major outcomes

Dissemination of innovations designed to meet one or more societal requirements. All activities under this area are expected to produce innovative solutions (systems strate-

gies, approach, methods, procedures models, prototypes and the like) to the problems faced by the participating Member States in making education relevant to societal requirements, and at the same time producing better and capable institutions within each participating Member State.

Overall strategies

All APEID modalities.

Monitoring and evaluation procedures

A variety of methods may be used but the effectiveness of a particular programme activity must be measured against one or more developmental goal that lies outside education itself. For example, improving access to school should not be measured solely by increase in school rolls, but against the principle of social justice or equity. Do all population groups have equal opportunity to enter school?

Programme area: Education for rural development (ERD)

Trends and issues:

For the majority of countries in Asia and the Pacific, rural areas and agriculture are still the economic mainstay. There is a disproportionate incidence of problems of illiteracy and failure to complete schooling in rural areas. Many of the efforts have been made to improve the existing conditions by integrating formal and non-formal education in rural areas. These efforts need to be continued and a follow-up made. In recent years new issues and needs have emerged which call for re-examination and changes in the existing practices. There is also a need for a close co-operation and harmonization of education for rural and urban populations.

Purpose:

To strengthen national capacities to innovate and develop education in rural areas and enhance its contribution to the improvement of the quality of life in rural areas, and to promote integrated (social, economic, and cultural) rural development and nation building.

Specific objectives

1. To facilitate greater awareness of the crucial importance of the rural sector for national development.
2. To devise more appropriate, comprehensive, and integrated development strategies for promoting education in and for rural development.
3. To develop positive attitudes towards and relevant skills for rural life.
4. To make education more relevant to the needs of community development.
5. To improve the quality of teaching and to transform educational administration and management systems in rural areas.
6. To facilitate better linkages and better co-operation between rural development and urban development, between education and other social sectors, and of this programme area with other areas, especially with APPEAL.

Target groups

1. Educational policy-makers, planners and managers.
2. Rural community leaders.
3. Teachers in rural areas.
4. Researchers and experts working this field.
5. The formal school population and the out-of-school population and adults in rural areas.

Special considerations

1. Less and least developed countries.
2. Small island states
3. Women and girls, disadvantaged groups, out-of-school population.
4. Mountainous and remote areas, and areas where minorities are concentrated.

Action programmes:

1. Joint innovative project on education in and for integrated rural development.
2. Review of research studies on the major causes of educational underdevelopment and effective strategies for integrated development.
3. Long-term planning and policy-making concerned with educational innovation for integrated rural and urban development.
4. Development of a curriculum suited to the special features of integrated rural development.
5. The education of women and girls, minorities and out-of-school children and youths.
6. Methods and contents for training of teachers in and for rural development.

Expected outcomes

1. Wider dissemination of information, reports and other relevant materials at national/sub-regional/regional levels.
2. Greater commitment to rural development and more integrated efforts on the part of government leaders and development planners and educational administrators.
3. Greater involvement of rural community in education, and wider participation of schools in community development activities.
4. More relevant curriculum and training materials.
5. Efficient and effective decentralized administration and management systems.

Linkages with other sub-programmes

1. Literacy and UPE programmes of APPEAL.
2. Education for All
3. Education for the world of work.
4. Science and technology education.
5. Restructuring of secondary education.

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Programme area: Education for rural development

Action programme: ERD/1. Joint innovative project on education for rural development

Purpose

To jointly study and analyze the experiences of Member States in rural development with the aim of developing recommendations for a common strategy within the region which may assist policy makers, planners, community leaders, etc... in the elaboration and realization of a strategy for local rural development. This strategy will promote and strengthen education suited to rural development.

In this area in the past few years a number of countries have carried out successful projects. It is now necessary to capitalize on the work completed and disseminate knowledge of the outcomes throughout the region.

Specific objectives

1. To prepare case studies within each country.
2. To exchange experiences.
3. To disseminate documentation.
4. To develop a strategy for local rural development in each participating Member State.

Target groups:

1. National education planners and specialists
2. Rural community leaders
3. High level educational administrators

Special considerations

Attention should be paid to small island states, less and least developed countries.

Activities: See the following pages.

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Programme area: Education for rural development

Action programme: ERD/2. Review of research studies on the major causes of educational under-development and effective strategies for integrated development

Purpose

The situation of education in relation to rural development is less than satisfactory. It is necessary to study the underlying factors and major causes of this situation in order to arrive at effective strategies. In this way all available resources can be mobilized for the development of education which is suited to the societal requirements in rural areas. One particular purpose is to improve the quality of life for the rural poor.

Specific objectives:

1. To identify major variables that cause the ineffectiveness of educational programmes in rural areas.
2. To organize training workshops for key personnel and specialists with the aim of strengthening the capabilities of Member States in planning and management of education for rural development.

Target groups

Educational planners and administrators.

Activities:

See the following pages.

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Programme area: Education for rural development.

Action programme: ERD/3. Long term planning and policy making for educational innovation for integrated rural and urban development

Purpose

There are sharp discrepancies between levels of development in rural and urban areas. Vast rural areas remain untapped with manpower and the resources which could very meaningfully contribute to national development. Development of rural areas should squarely focus on local requirements vis-à-vis the national development needs.

Specific objectives

1. To encourage national and regional joint studies.
2. To assist policy-makers and educational planners in developing education in the rural sector in relation to urban development.
3. To develop innovative projects focused on education for rural development.

Target groups

Policy-makers, educational planners.

Activities:

See the following pages.

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Programme area: Education for rural development

Action programme: ERD/4. Development of a curriculum suited to the special requirements of integrated rural development

Purpose

Curriculum plays a very important role. To meet the requirements of rural development, the curriculum should have the following criteria.

1. Reach an international standard;
2. Reflect national characteristics; and
3. Reflect local characteristics.

To realize this integrated strategy, it is necessary to have a relevant curriculum. Each country can provide valuable experiences. These need to be analyzed, summarized and disseminated.

Specific objectives

1. To collect the experiences of countries in developing curriculum relevant to the special needs of rural areas in the context of integrated rural development.

2. To analyze and to summarize the information gathered.
3. To develop curricula suited to local needs and requirements.

Target groups

Curriculum developers, educational planners, supervisors and teachers.

Activities:

See the following pages.

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Programme area: Education for rural development

Action programme: ERD/5. The education of women and girls, disadvantaged groups, minorities, and out-of-school children and youth.

Purpose

To organize regional, sub-regional and national activities and projects focused on programmes which promote democratization of education. These projects should pay special emphasis on women and girls, disadvantaged and minority groups, and out-of-school children and youth.

Specific objectives

1. To organize mobile training seminars;
2. To conduct national training workshops; and
3. To disseminate relevant experiences and information.

Target groups

Policy-makers, educational planners, local authorities, teachers.

Activities:

See the following pages.

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Programme area: Education for rural development

Action programme: ERD/6. Methods and content for training of teachers for rural areas and rural development.

Purpose

Teachers in general and in particular in rural areas play key roles in the development and nurturing of good educational programmes. Therefore emphasis should be placed on the training, both pre-service and in-service, of teachers.

Specific objective

To organize training workshops to plan pre-service and in-service training of teachers for rural areas.

Target groups

Planners of courses of training for teachers, and teachers engaged in training and teaching in rural areas.

Activities:

See the following pages.

Activities

(Consolidated activities of action programmes (ERD/1-6)

No	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
ERD/1	Planning education in and for integrated rural development	3 years	– Planning panel meeting – Synthesis of national and regional innovative experiences – National / regional seminars – Inter-country/inter-project study visits – Review and evaluation meeting – Dissemination of information	– National educational planners and specialists – Rural community leaders – High-level educational administrators, and curriculum developers,	Mid-term review Summative evaluation	Summary of national reports, guidelines for planning education for integral rural development. Recommendations to member countries in the region. Bulletin of ROEAP
ERD/2	Review of research studies on major causes of educational under-development and effective strategies for integral development	6 months	– National studies – Regional seminars – Inter-country study visits – Dissemination	– Researchers – Educational/economic development experts – educational administrators		"State of the Art" report
ERD/3	Long-term planning and policy-making of educational innovations for integrated rural and urban development	2 years	– Joint studies, collaborative research National workshops – Regional seminar – Inter-country study visits – Dissemination	– Educational/economic planners and policy-makers – Researchers – High-level administrators		Regional reports Recommendations for policy-makers

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
ERD/4	Development of relevant curriculum in view of special needs of integrated rural development	3 years	– Training workshops – Inter-country study visits – Exchange of teaching materials – Curriculum development meetings	Curriculum developers – High-level educational decision-makers – Researchers		Study reports Curriculum materials Guidelines for renewal of education content
ERD/5	Improve the education of disadvantaged groups, including women and girls, minorities, and out-of-school children and youth.	3 years	– National training – Advisory missions of experts – Dissemination – Financial support		Summtive evaluation	Evaluation reports
ERD/6	Advisory services of experts to national training workshops on preservice and in-service training of teachers in and for rural areas	3 years	– National training workshops – Advisory service of resource persons from ACEID and/or selected countries	Teacher training specialists Educational administrators Resource persons		Guidelines for teaching-learning in rural areas

Programme area: Education for the world of work (EDW)

Trends and issues

There are some common problems in many countries of the region in relating education for the world of work. The supply of skilled manpower for the developmental needs of the countries and the problem of unemployment demand that education and work should remain a major area of concern during the fourth programming cycle of APEID.

Some of the major problems include insufficient utilization of appropriate technology, inadequate arrangements for preparation and continued retraining of personnel and technical teachers, lack of proper equipment and facilities, lack of effective linkages between educational systems and agricultural or industrial enterprises.

Purpose

The activities in this area will focus on introducing work as an integral part of general education, including vocationalization of general education aiming at harmonious personality development. Pupils exposed to scholastic subjects for intellectual development, who have opportunities for manual work through the chance to use various tools, to develop basic skills of production and proper attitudes towards manual labour can be expected to develop in a balanced way. The expansion and development of various vocational and technical education programmes to inculcate employable skills in school leavers will also be attempted in accordance with the changing needs of technological development. In vocational and technical education the aim will be to produce qualified manpower for the changing needs of society. Rapid technological advance will require training/retraining of youth and adults in different skill areas in both the formal and non-formal sectors.

The expertise available in the Associated Centres and the modality of mobile training team in vocational and technical education under Japanese FIT will be fully exploited.

Specific objectives

1. To promote research studies in the area of education and work to make education responsive to the changing goals and conditions of socio-economic development and advances in science and technology.
2. To create and enhance positive attitudes, to acquire knowledge and skills required for work, both in the modern and in the traditional sectors, utilizing various instructional materials, including textbooks and all mass media.
3. To enhance the relevance of general education to the actual needs of society including the special needs of small scale economies.
4. To develop appropriate technologies suitable to local environment and needs of communities.
5. To improve methods, forms and structures of training of personnel in general as well as in technical and vocational education, in the context of rapid technological advances.
6. To promote entrepreneurship in technical and vocational education and acquisition of productive skills leading to gainful employment or self-employment.

7. To incorporate in technical and vocational education newly emerging technologies such as computer science/informatics, biotechnology, automatization, etc.

8. To promote the study of future trends of technological development and future occupational requirements and related skills for preparing the necessary profiles of personnel and formulation of policies and strategies for their training and retraining.

Target groups

The broad categories of target groups which will be covered by the suggested programme action include:

1. The school population in general schools
2. The school population in technical and vocational schools
3. The out-of-school youth and adults needing training and retraining in different skill areas.

Target groups for each activity have been identified separately and indicated in the appropriate places.

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Programme area: Education for the world of work

Action programme: EDW/1: Research studies on relevance of education to socio-economic development and rapid advancements in science and technology.

Purpose

Rapid developments are taking place in science and technology. As a result, the economies of the countries are also undergoing changes. In order to meet the demand of changing goals and conditions of socio-economic development, research is needed to make education relevant to these changes.

The purpose of this programme action is to promote national research studies to make education relevant and responsive to the changing goals and conditions of socio-economic development and rapid technological advance.

Specific objectives

1. To determine skilled manpower needs in the light of changing goals and conditions of socio-economic development.
2. To suggest changes in curricula, forms and methods for training skilled manpower in both formal and non-formal systems.

Target groups

In- and out-of-school youth and adults entering the world of work.

Expected outcomes:

See the following page, last column.

Activities:

See the following page.

Activities: (EDW/1)

Activity No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
EDW/1	Research studies on relevance of education to socio-economic development and rapid advancement in science and technology	2 years	Conducting national case studies	National institutions/specialists	Analyses of national policies and situations for determining directions for training skilled manpower for the future

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Programme area: Education for the world of work

Action programme: EDW/2. Joint innovative project on integrating education and work

Purpose

Existing experiences of integrating education with the world of work show a variety of approaches and innovative practices in the countries of the region. However, there are still major problems in many countries of the region, such as under-utilization of appropriate technology, inadequate arrangements for preparation and upgrading of technical personnel, lack of proper equipment and facilities and ineffective linkages between schools and agricultural/industrial enterprises.

The purpose of this programme action is to strengthen national capabilities for planning and managing the reform of formal and non-formal education systems concerned with preparation of skilled manpower.

Specific objective

1. To determine the existing situation in policies and practices regarding the integration of education with the world of work.
2. To synthesize innovative experiences.
3. To develop appropriate instructional materials, including multi-media packages.

Target groups

Selected national institutions providing formal and non-formal skill training.

Expected outcomes:

See the following page, last column.

Activities:

See the following page.

Activities (EDW/2)

No	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
EDW/2	Joint Innovative Project on Integration of Education and work	2 years	– Planning Panel Meeting	National specialists		Guidelines
			– Research studies	National institutions/specialists.		Determining the state of the art in the countries
			– Synthesis of Experiences	Unesco staff, assisted by resource persons		
			– Development of appropriate software	National institutions, specialists and resource persons	Mid-term review	Packages of multi-media training materials
			– Inter-country inter-project study visits	Experienced teachers, teacher educators and educational administrators.		
			– Review and Evaluation Meeting	National specialists and resource persons	Summative evaluation	Bulletin of ROEAP on Education and Work
			– Dissemination	Unesco Secretariat		

Programme area: Education for the world of work

Action programme: EDW/3. *Development and utilization of appropriate technologies for the specific needs of small-scale economies*

Purpose:

The small scale economies are experiencing the same pressure of technological change as larger economies but lack necessary expertise to redesign their educational systems to respond to their specific needs.

The purpose of this programme action is to promote the optimum development and utilization of human and material resources by the small scale economies for better utilization of appropriate technology.

Specific objectives:

1. to stimulate and enhance the capability of small scale economies to develop and utilize of appropriate technologies.
2. to popularize successful innovative experiences and practices utilizing appropriate technology.

Target groups:

Small scale economies in urban and rural settings, and in small island states.

Expected outcomes:

See below, last column.

Activities:

No.	*Activity title*	*Duration*	*Method of operation*	*Categories of personnel*	*Expected outcome*
EDW/3	Mobile Training Seminar on development and utilization of appropriate technology for the specific needs of small-scale economies	3 weeks	Study visits and training workshops	Educationists, enterpreneurs, and experts	Optimal utilization of appropriate technology in small scale economies

Programme area: Education for the world of work

Action programme: EDW/4 Improvement of methods, forms and structures of general, technical and vocational education

Purpose:

The methods, forms and structures of general, technical and vocational education vary from country to country. There is an urgent need to rationalize these methods, forms and structures to adapt education systems to these rapid technological changes which are affecting directly the world of work.

The purpose of this activity is to develop a set of guidelines and recommendations for regional and national activities for the improvement of methods, forms and structures of general, technical and vocational education.

Specific objectives:

1. To develop guidelines and recommendations for the improvement of methods, forms and structures of general, technical and vocational education.
2. To train national technical education specialists, educational planners and administrators, industrial/agricultural managers and media specialists for improving methods, forms and structures of general, technical and vocational education.

Target groups:

Educational planners, administrators, curriculum development experts, industrial/agricultural managers, media specialists.

Expected outcomes:

See the following page, last column.

Activities:

See the following page.

Activities (EDW/4)

Activity No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
EDW/4.1	Sub-regional workshops on improvement of methods, forms and structures of general, technical and vocational education	1-2 weeks	Training workshops	Educational planners, curriculum developers, technical teacher educators, agricultural/industrial managers, media specialists	Set of guidelines and recommendations for regional and national activities
EDW/4.2	Series of National Workshops on improvement of methods, forms and structures of general, technical and vocational education	1-2 weeks	Training workshops	Educational administrators, technical educators, urban and rural development specialists	Implementation and adaptation of guidelines and recommendations of the sub-regional workshop at national levels

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Programme area: Education for the World of Work

Action programme: EDW/5 Development of physical facilities and exemplar instructional material for work education activities.

Purpose

In order to provide opportunity to all students within the formal and non-formal system to develop various employable skills and proper attitudes to work, there is a need for proper physical facilities and special instructional materials. These include: workshops, laboratories, machinery, tools, equipment and materials for various technical trades, as well as appropriate environment and materials for agricultural activities, business and home economic suitable to local environment – both in urban and in rural settings, utilizing locally available resources and environment.

The purpose of the activities in this programme action is to develop prototype equipment, training modules and other exemplar instructional materials, and prototype workshop/building/equipment designs, according to the specific training needs at primary and secondary levels of general education as well as more sophisticated workshops, laboratories and equipment for the specialized technical and vocational schools or training centres.

Specific objectives

1. To determine the needs for training facilities and materials for various categories of work activities.
2. To develop, try-out, and improve the design of prototype equipment, facilities and to prepare instructional materials for all subject areas of work-oriented activities in general education and for the various subjects of vocational and technical education.

3. To promote the exchange and dissemination of successful exemplar materials, training manuals, teachers guides, work safety standards and instructional materials as well as prototype workshop equipment designs and building digests.

Target groups

1. In and out of school youth and adults using various physical facilities and instructional materials.
2. Teacher trainers, technical teachers, instructors, laboratory assistants, technicians and other personnel utilizing these physical facilities and instructional materials.

Expected outcomes:

See the following page, last column.

Activities:

See below.

Activities (EDW/5)

Activity No	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
EDW/5	Sub-regional workshops on development of physical facilities and exemplar instructional materials for work education activities	2 weeks	Training workshop	Specialists in instructional materials, curriculum planners, workshop instructors subject specialists, education facilities planners and designers	Modular, instructional materials, prototype workshop and equipment designs, training manuals, work safety manuals, building digest.

Programme area: Education for the world of work

Action programme: EDW/6. Determining new directions in technical and vocational education reflecting the needs of newly emerging technologies

Purpose:

Rapid technological change have significance for all sectors of education, particularly technical and vocational education. The changes in the world of work require the introduction of new directions in technical and vocational education in determining the content of curriculum instructional materials and in the training of teachers and other personnel.

The purpose of this activity is to examine which newly emerging technologies would demand changes in the area of technical and vocational education.

Specific objectives:

1. to develop guidelines for the introduction of newly emerging technologies in technical and vocational education curricula and respective syllabi.
2. to recommend measures for the improvement of curriculum, instructional materials and training of technical teachers, workshop instructors, laboratory technicians and other personnel.

Target groups:

Educational planners, technical educators, information technology specialists, educational administrators, curriculum development experts, teacher trainers and representatives of industrial enterprises.

Expected outcomes:

See below, last column.

Activities:

Activities (EDW/6)

No.	*Activity Title*	*Duration*	*Method of operation*	*Categories of personnel*	*Expected outcome*
EDW/6	Regional workshop on new directions in technical and vocational education reflecting the needs of newly emerging technologies	2 weeks	training workshop	educational planners, curriculum developers, technical educators, industrial managers, information technology specialists and technologists	– Exchange of inter-country experiences – development of guidelines for the introduction of new emerging technologies

Consolidated list of activities : EDW/1 – EDW/6

No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
EDW/1	Research studies on relevance of education to socio-economic development and rapid advancement in science and technology	2 years	Conducting 10 national case studies	National institutions/specialists		Analyses of national policies and situations for determining directions for training skilled manpower for the future
EDW/2	Joint Innovative Project on Integration of Education and Work	2 years	– Planning Panel Meeting	national specialists		Guidelines
			– Research studies – Synthesis of Experiences	national institutions/specialists. Unesco staff, assisted by resource persons.		Determining state of art in the countries
			– Development of appropriate software	National institutions, specialists and resource persons	Mid-term review	Packages of training multimedia materials
			– Inter-country inter-project study visits	experienced teachers, teacher educators and educational administrators		
			– Review and Evaluation Meeting	national specialists and resource persons	Summative evaluation	
			– Dissemination	Secretariat		Bulletin of ROEAP on Education and Work
EDW/3	Mobile Training Seminar on development and utilization of appropriate technology for the specific needs of small-scale economies	3 weeks	Study visits and training workshops	educationists, enterpreneurs, and experts		Optimal utilization of appropriate technology in small scale economies
EDW/4.1	Sub-Regional Workshops on improvement of methods, forms and structures of general, technical and vocational education	1-2 weeks	Training workshops	Education planners, curriculum developers, technical teacher educators, industrial managers media specialists		Set of guidelines and recommendations for regional and national actions
EDW/4.2	Series of National Workshops on improvement of methods, forms and structures of general, technical and vocational education	1-2 weeks	Training workshops	Educational administrators, technical educators urban and rural development specialists		Adaptation of guidelines of recommendations of the Sub-regional workshop at national levels

No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
EDW/5	Sub-regional Workshops on development of physical facilities and exemplar instructional materials for work education activities	2 weeks	Training workshop	Curriculum planners workshop instructors, subject specialists, education facilities planners		Modular, instructional materials, prototype workshop equipment designs, training manuals, work safety manuals, building digests
EDW/6	Regional workshop on new directions in technical and vocational education reflecting the needs of newly emerging technologies	2 weeks	Training Workshop	Education planners, curriculum developers, technical educators, industrial managers, information technology specialists and technologies		– Inter-country experiences – Set of guidelines for introduction of new emerging technologies

Programme area: Science and technology education including science for all (STE)

Issues and trends:

The last two decades have seen a remarkable change in the perception of developing countries of science and of education. There is a greater awareness and realization that applied science and technology are key factors in the modernization process. It is therefore important that education in science (including technology and mathematics) begins as early as possible and is directed to all sections of the population. The preparation for improving science education and extending scientific literacy to all sections of the population is therefore an urgent need to enable the applications of science and effective use of technologies in national development.

Considerable efforts have already been directed towards the improvement of science education in almost all APEID countries during the past two decades and many advances can be identified in the area of curriculum development, development of instructional materials, training of teachers, etc. However, the majority of these efforts have mainly been confined to the formal school system with the result that a sizable population of out-of-school children and a large population of adults have hardly had any chance of developing a minimum level of scientific literacy and appreciation of the potentialities of science and technology for improving their living conditions.

Purpose:

The main purpose of actions to be undertaken under this programme area is to promote the achieving of 'Science for All'. This implies providing everyone with scientific competencies, knowledge, attitudes and skills appropriate to his or her immediate needs, in order to help in the eradication of poverty, the provision of proper conditions for decent living and the achievement of social justice.

Specific objectives:

The following specific objectives provide more concrete goals to be aimed at through various innovative programming actions under this programme area for promoting a programme of 'Science for All':

1. the development of a scientific climate and temper in all segments of the population;
2. making it possible for all people to reach their full potential in the field of science and its applications;
3. identification of priority areas for particular programmes of "Science for All" which will meet specific needs of target groups;
4. stimulation of national efforts for the formulation of national science promotion and science education policies;
5. national initiatives to provide science education to all pupils within the formal sector;
6. inclusion of science components in all types of education and extension programmes directed towards literacy and post-literacy, out-of-school children and youth, and continuing education; and
7. development of facilities and activities for public understanding of and support for science and its applications.

Target groups:

The broad target groups to be covered under various proposed programming actions will be:

1. the formal school population for whom science and technology education should become an integral part of primary and secondary education for all children, including those who will proceed further with science and technology education;
2. the out-of-school population which will include: i) the out-of-school children and youth, including those who should have been in schools under the universalization of education process; ii) the work force including the vast numbers of illiterates, and iii) the educated adult section of the population.

Special considerations:

1. the needs of rural areas and girls and women;
2. the nurturing of talent in science and technology;
3. linking science teaching/learning to real-life needs of various target groups.

Monitoring and evaluation

Wherever necessary, detailed evaluation and monitoring procedures and tools will be designed for each specific activity/programming action.

Structuring of the programme area:

In view of the past achievements and the needs of the two broad target groups indicated above, and the approaches and the delivery systems that will have to be developed to provide science and technology related knowledge and experiences, the programming action under this programme area have been presented in two parts: Part A and Part B, the former having major focus on target group i) with necessary interlinks to extend the outreach of the formal system for inputs to the needs of target group (2) clientele and the latter Part B to focus mainly on the needs of group (2) for which very few innovations have been promoted under APEID in the past.

Programming actions:

The following programming actions have been proposed for organizing activities during the fourth cycle of APEID:

Part A

1. Curriculum renewal – methods, materials and evaluation;
2. Developing competencies of science teachers and teacher educators;
3. Design, prototype development, repair and maintenance and effective use of science equipment with focus on low-cost and teacher made equipment;
4. Identification and nurturing of scientific talent;
5. Interaction of science, technology and society.

Part B

1. Development of learning/teaching and training materials for use in extension programmes for developing science and technology literacy and public understanding of science and technology.
2. Development and strengthening of delivery systems for out-of-school target groups through training of personnel for out-of-school scientific activities, and mobilization of expertise and resources.

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Programme area: Science and technology education including science for all

Action programme: STE/1. Curriculum renewal – methods, materials and evaluation

Purpose:

In all countries of the region, curriculum renewal continues to be the focal point of the programmes for improvement of science education. The periodicity of major revision of school science curriculum varies over a wide range of years. The intensity of work in the area of science curriculum development is reflected by the fact that many countries are either implementing new curricula or have plans for their renewal.

Traditionally, the content for learning in science education has been drawn from within science itself, rather than from the needs of the society for science. Even recent school curricula that included social issues, and life and work experiences, still tended to emphasize the conceptual and theoretical knowledge which, for many students, are seen as having little relevance outside the school in their daily life or in the life of their families.

With a view to promoting the concept of science for all students as an integral part of general education throughout the schooling period, the purpose of activities included under this programming action is to promote inter-country exchange of experiences and materials related to innovations in curricula, teaching/learning methods, development of instructional materials and evaluation procedures for enhancing the relevance of school science and technology education so that it can contribute to their daily life and development needs. For purposes of the activities, "Science" (which includes technology and mathematics) will be viewed as an organized and ordered way of investigating and understanding the world, which is essentially practical in nature and its applications in areas such as health, nutrition, sanitation, population, environment, resource development and utilization and technology and its responsible use.

Specific objectives:

1. To develop an inventory of science and technology education curricula innovations undertaken by Member States and to collect exemplars;
2. To promote inter-country and in-country exchange of ideas and experiences in science and technology curriculum innovation focusing on the popularization of science and technology;
3. To develop guidelines of science and technology education curricula to respond to the real-life needs and strategies for enhancing the relevance of the learners and for developing values and decision making;

4. To develop and design exemplar teaching/learning materials focusing on the development of scientific competencies, creativity and values contributing to the improvement of daily life and development needs;
5. To develop evaluation techniques and test materials concentrating on measuring and assessing affective and psychomotor areas of learning in science and technology;
6. To identify and develop strategies for teaching values in the context of science and technology.

Target groups:

1. Science curriculum developers;
2. Science teachers;
3. Science education supervisors, inspectors and administrators.

Special considerations

Population in the rural areas and other disadvantaged groups.

Activities:

See the following pages

Activities (STE/1)

No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
STE/1.1	Inventory/portfolio of science/technology curriculum innovations and exemplar	6 months	synthesis of collected information and materials	specialist teams	inventory/portfolio of case studies
STE/1.2	Exchange of ideas/experiences in science/technology focusing on curriculum renewal particularly related to popularization of science and technology	3 months	– mobile team – study visits – attachment – regional workshop – national workshop	– curriculum developers – science education specialists/educators	– portfolio of case studies – experiences
STE/1.3	The development of guidelines for value education in the context of science/technology	2-3 weeks	– TWG – seminar	– curriculum developers – value education specialists – science educators	– guidelines for value education related to science and technology
STE/1.4	The development of curriculum materials focusing on the development of scientific competences, creativity and values a) primary level b) secondary level	3-4 weeks	– TWG – seminar – regional workshop/national workshop	– curriculum developers – science education specialists from various science/technology fields	– curriculum materials
STE/1.5	Collection of information and ideas related to evaluation techniques and test materials concentrating on assessing affective areas of learning in science and technology	6 months	snythesis of information/ideas	specialist team	portfolio of case studies
STE/1.6	The development of test materials for assessment of affective area	3-4 weeks	– TWG – seminar	– evaluation specialist – curriculum developer – science teacher educators	– test materials – guidelines for evaluation/test material development focusing on affective domain of science/technology learning
STE/1.7	Identification/development of strategies and methods for teaching values in the context of science and technology	6 months	– workshop at regional/national level – attachment – case study – study visits – mobile team	– Science teacher – supervisors/inspectors – principals – science teacher educators – professionals – instruction specialists	– portfolio of case studies – new teaching methods – experiences

Note: The above activities will need to be closely linked to Programming Action 2 – Developing competencies of science teachers and science educators.

Programme area: Science and technology education including science for all

Action programme: STE/2 Developing competencies of science teachers and science teacher educators

Purpose:

With the universalization of primary education in future the school classes would be more heterogeneous having pupils from all stratas of the society and with varying socio-economic, cultural and natural environment. In addition, with the rapid growth of scientific knowledge and its explosive applications through technology for modernization of the societies and improving the quality of life, the interactions between science, technology and society are bound to increase considerably resulting in the rapidity of the pace of changes.

To survive in and cope with such a rapidly changing environment, school science and technology education programmes will have to provide students with access to meaningful knowledge, skills and attitudes to the students through radical changes in curricula of school science and strategies and methodologies for its teaching and learning.

The science teachers, though in a new and wider role, will continue to be the pivot of the teaching and learning activities in the formal school system for generating meaningful science related knowledge, skills and attitudes, and to make the science learnt in the schools more relevant for their pupils to cope with the rapid socio-economic, cultural and environmental changes brought about by the application of science and technology.

To effectively play their new role, the science teachers would need to develop open competence including processes of information processing, problem solving, creativity and decision making.

The purposes of activities under this programming action is to promote innovations leading to development of science teacher training programmes, both pre-service and in-service, which will have their focus on competence-based training.

Specific objectives:

1. To develop an inventory of general and specific science teacher competencies to cope with their changing role;
2. To conduct studies on innovative on-going/experimental training programmes focused on competence development;
3. To develop a comprehensive battery of identified competencies with focus on socially oriented themes and values;
4. To develop exemplar training materials/multimedia packages;
5. To promote inter-country and intra-country exchange of information and experiences;
6. To strengthen national initiatives for developing competence-based training programmes and development of training materials for upgrading science teacher competencies

Target group:

1. Science teachers;

2. Science teacher educators;
3. Science supervisors/inspectors;
4. Staff of resource centres responsible for in-service and continuing education of science teachers; and
5. Science curriculum developers.

Special consideration:

Open competence[1] and needs of small schools.

Activities:

See the following pages

[1] For details refer to APEID publication "Training of Science Teachers and Teacher Educators", 1985.

Activities (STE/2)

No.	*Activity*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Expected Outcome*
STE/2.1	Inventory of training programmes focused on	6 months	through proforma to ACs	staff responsible for the activity	Inventory/portfolio
STE/2.2	Case studies on innovative training programmes for competence development	6 months	case studies and synthesis	team of specialists	Portfolio of case studies along with a synthesis
STE/2.3	Development of a comprehensive battery of training programmes	(2 w)	Technical Working Group	team of specialists engaged in such programmes	Battery of training programmes
STE/2.4	Development of exemplars of training materials and multi media packages	(1 w) x 6	Technical Working Group	team of specialists	Exemplar of training materials
STE/2.5	Development of exemplar of training programmes and utilization of the programmes	(1 w) x 6*	Regional Training Workshop	Science teacher trainers Science Educators	Training programmes/materials Cadres of experienced personnel
STE/2.6	Development and utilization of effective training programmes	(1 w) x 6 each	National Workshop and consultant – Attachment – Mobile training teams	Science teacher trainers Science educator	Training programmes/materials Cadres of experienced personnel
STE/2.7	Production of training materials	–	–	Associated Centres	A battery of training materials
STE/2.8	Collection and dissemination of materials	–	–	Associated Centres	Availability of effective training materials
STE/2.9	Follow-up action	(3 w)	M.F.O.S.	Specialist	Evaluative report

* 2 for primary level
2 for lower secondary level (integrated science)
2 for upper secondary level (separated science)

**Note:* 1. In the development of exemplar or module for training the following components must be included:

a) identification of teacher competencies in measurable statement
b) identification of tools and techniques for a reliable evaluation
c) development of corrective techniques to help trainees master in particular competencies

2. Case studies and training materials to be derived as outcomes must be in a comprehensive, effective and practical manner.

Programme area: Science and technology education including science for all

Action programme: STE/3 Promoting and strengthening the design, prototype development, evaluation, maintenance, repair and effective use of science equipment with focus on low-cost and teacher-made equipment

Purpose:

One of the major factors that has been identified as a stumbling block in the qualitative improvement of science teaching in the schools, where the new methodologies are focusing on the concept that 'Science is Doing' is the lack of proper equipment and physical facilities related to science and technology teaching. As a result a few activities focused on this concern were implemented during the third cycle operations of APEID. It has been strongly suggested that more concerted and co-operative action by the Member States is needed to tackle this main issue.

The purpose of this programming action is to enable the participating Member States to share their experiences in this regard, and develop a set of activities which will contribute towards developing innovations in the identified area so as to enrich the relevance and effectiveness of teaching of science and technology within the formal school system. Therefore the focus of the activities included under this programming action will be to strengthen national capabilities, through exchange of experiences and co-operative efforts in the design, prototype development and evaluation of science equipment and its maintenance and repair and effective use with stress on low-cost equipment.

Specific objectives:

1. To study the state of the art in the design and prototype development of science equipment relevant to the new curricula;
2. To develop teacher training manuals on repair and maintenance of school science equipment;
3. To propose guidelines and strategies for further innovative work in the design, prototype development and evaluation of science equipment;
4. To encourage the efforts for promoting teacher made improvised equipment with the help of the learners and resorting to greater use of available environmental and community resources for providing science related experiences;
5. To prepare a cadre of people trained in the design, prototype development and evaluation of the effectiveness of science equipment;
6. To encourage the establishment of a design storage and dissemination exchange system for science equipment.

Target groups:

1. Staff of the Associated Centres engaged in the design and development of science teaching equipment;
2. Expertise available in the production sector;
3. Industrial engineers;
4. Science teachers and curriculum developers.

Special consideration:

A focus on low-cost and teacher improvised science equipment and utilization of the available related items; needs of the Pacific Member States; and the least developed countries.

Activities:

See the following pages

Activities (STE/3)

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
STE/3.1	Inventory of ongoing projects	6 months	collection from ACs through proforma	staff resposible for such projects		Inventory
STE/3.2	Short case study of infrastructures for design and prototype development of science teaching equipment	6 months	short case study and synthesis through a consultant	teams of specialists engaged in projects		Portfolio of case studies along with their synthesis
STE/3.3	Analysis of existing situation and identifying equipment suitable for a co-operative design and development programme (JIP)	2 weeks	task force meeting	specialists from ACs engaged in the task		Guidelines and strategies and a plan for the JIP
STE/3.4	A. Research and development activities including development of prototypes proposed by the task force and their evaluation	1 year	national R & D activities	staff of identified projects		design, drawings and prototypes of selected science equipment
	B. Support for above through resource persons and attachment for the staff of the projects in ACs	1 month each	attachments/exchange of experiences	staff of development projects		exchange of experiences and training in specific skills
STE/3.5	Mid-term evaluation of progress on the JIP on design and development of prototypes	2 weeks	consultation meeting	key personnel from participating projects		analysis of progress made and course correction for future directions
STE/3.6	Follow-up and strengthening of national activities	6 months	specialists groups in the Member States	specialists engaged in national projects		improved draft designs for selected school science equipment items finalized
STE/3.7	Evaluation of the equipment designs under JIP	2 weeks	regional meeting	project directors		finalized exemplars of prototypes and strategies for further development
STE/3.8	Follow-up national level activities	6 months	national R & D activities	project staff		finalize designs (including technical drawing of selected items of equipment)

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
STE/3.9	Establishment of a design, storage and dissemination facility in a selected AC	1 year	collection and examination of the developed designs	staff of selected ACs involved in science equipment designing		a collection of prototype designs which can be shared with all countries for adoption or adaptation including exchange of dies
STE/3.10	Guidelines & manual on repair and maintenance of science equipment	2 weeks	regional meeting	project staff and specialists in the subject science teachers & teacher educators		a manual on maintenance and repair of essential school science equipment
STE/3.11	Attachments/exchange of resource persons for strengthening national initiatives	4 weeks	Attachments/exchange of resource persons	national level staff of projects engaged in design, and development of science equipment		Further development of specific skills and improvement of the national projects

Note: The above activities will be very closely linked to the activities envisaged under Programming Action 1 related to the renewal of the curriculum and evaluation practices and activities under the Programming Action related to education and work to ensure how far the potentials available therein can be used to duplicate the prototypes developed under this programme.

Programme area: Science and technology education including science for all

Action programme: STE/4. Promoting and strengthening the development of facilities for identification and nurturing of scientific and technological talent

Purpose:

The need to provide science and technology education to all sections of the population has been fully recognized. One implication of this is that all children within the formal school system should have an opportunity to learn science and technology as an integral part of general education right up to the end of the secondary stage of schooling. This will provide a reasonably large base from which will emerge a group of students who would pursue higher studies in science and will then be engaged in pushing the frontiers of science and technology through research and generation of new scientific knowledge. More and more countries of the region are therefore engaged in developing programmes for the identification and nurturing of gifted/talented students in science and technology to take care of the latter concern.

The purpose of the activities included under this programming action is to strengthen and stimulate national institutions and groups to develop programmes for recognition and further development of scientific and technological talent among the school population, particularly in deprived areas.

Specific objectives:

1. To prepare inventory of innovative projects related to identification and nurturing of scientific and technological talent for expanding the information base;
2. To prepare case studies of selected projects under way in the member countries, and their synthesis;
3. To promote exchange of experiences and collectively develop guidelines for locating and nurturing of scientific and technological talent;
4. To co-operatively develop exemplar identification tools and programmes in nurturing of scientific talent;
5. To suggest curriculum development strategies for providing more divergent thinking and creativity for the gifted.

Target groups:

The total secondary school population in the formal school system.

Special considerations:

Population in the rural area and other disadvantaged groups

Activities:

See the following pages

Activities (STE/4)

No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
STE/4.1	Inventory of innovative projects	6 months	collection from ACs through proforma	staff responsible for such projects	inventory
STE/4.2	Short case studies of innovative projects	6 months	case studies and synthesis through consultant	teams of specialists engaged in the project	portfolio of case studies along with a synthesis
STE/4.3	Development of guidelines for identification and nurturing of talent	2 weeks	TWG (regional level)	specialists from selected projects and resource persons	guidelines and strategies
STE/4.4	Exchange of experiences	3 weeks	inter-country/inter-project study visits cum field operational seminar	project leaders	exchange and synthesis of experiences with suggestions for improving the visited projects
STE/4.5	Development of exemplar identification tools and nurturing programmes	2 weeks	regional workshops (2 + 1)	project staff engaged in developing tools and nurturing programmes	exemplars of identification tools and nurturing programmes
STE/4.6	Testing of the identification tools and proposed nurturing programmes	1 year	national pilot projects and workshops	science curriculum developers, evaluation specialists and psychologiests	pool of test items and cadre of trained people
STE/4.7	Developing skills of item preparation	4 weeks	attachments/internships at selected ACs	staff of projects engaged in test item writing	improved insights and skills
STE/4.8	Exchange of experiences for young scientists	2 weeks	inter-country/inter-project study visits	young scientists identified under various talent selection programmes	exchange of experiences
STE/4.9	Developing enrichment programmes for the gifted	2 weeks	regional writing workshops (2)	science curriculum developers and subject specialists	guidelines and strategies and some exemplars

Note: The above activities will be closely linked to the activities envisaged under Programming Action 1 related to the renewal of the curriculum and evaluation practices.

Programme area: Science and technology education including science for all

Action programme: STE/5 Interaction of science, technology and society

Purpose:

The main purpose of the activities under this programming action is to promote understanding among science curriculum developers, teacher educators and science teachers of the interaction of science, technology and society in the context of students' environment and to help provide them with knowledge, skills and attitudes that will enable them to cope with issues that arise as a result of the impact of science and technology on society. Such science related social issues already face people in developing countries (e.g. development in biotechnology and their implications on values systems of individuals); and these are expected to become more common as countries progress scientifically and technologically. Science, technology, society issues could become the vehicle through which students learn decision making skills and develop values (e.g., scientific attitudes, and positive attitudes towards science and their environments).

Specific objectives:

1. To develop an information base through the collection of exemplar materials from countries of the region;
2. To identify different ecological environments, and the technologies they possess, that exemplify types of environment where the large majority of people live;
3. To develop manuals of training methods and techniques, and instructional materials on science and technology education;
4. To develop possible programme elements for inclusion in the training of science teachers to handle issues related to interaction of science and technology education with society.[1]

Target groups:

Staff members of curriculum development units/centres, science supervisors, science teachers, researchers.

Special considerations:

Needs of small island states; environmental aspects (pollution, consumerism).

Activities:

See the following pages

[1] The activities will be closely related to Programming Action STE/A.2 through its various activities.

Activities (STE/5)

No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
STE/5.1	Studies on interactions of science, technology and society	continuing over a year	collection via mail through ACs	library personnel of ACs	collection of instructional materials in the ACs interested in STE; listing of these materials
STE/5.2	Identification of different ecological environment and the technologies they possess	3-4 months	study groups at country level to identify interactions of S & T in different ecological environments, e.g. agricultural fishing, forest, industrial environments	staff of CDCs, science teachers, science educators, researchers cultural/sociologists	case studies, research reports focusing on specific environments, identification of areas of STE interactions
STE/5.3	Development of a manual of training methods and preparation of instructional materials	2 months	working groups at national level with support of resource persons from other ACs and national agencies followed by a synthesis meeting. Product of STE/5.1 should be made available to this group as background materials	curriculum writers, key teachers, supervisors, researchers (cultural anthropologist, science educators); a multidisciplinary team will be needed	training manual focused on teaching methods exemplar instructional materials
STE/5.4	Dissemination of instructional materials on S & T and training of teachers at local level	continuing – training workshops – 1 month	dissemination of instructional materials and the training manuals prepared in STE/5.3 to teacher training institutions; use of these materials in orientation sessions national & local levels	staff of teacher training institutions and key science teachers	availability of S & T instructional materials for different types of ecological environment
STE/5.5	Support to national level activities for further development of materials related to national cultural needs	2 years contract agents	national workshops	relevant specialists	exemplar teaching/learning materials

Note: The outcomes of these activities would be an input for Programming Action 2 to develop teacher competencies related to this concern.

Programme area: Science and technology education including science for all

Action programme: STE/6 Development of learning/teaching and training materials for use in extension programmes for developing science and technology literacy and public understanding of science and technology

Purpose:

The promotion of science and technology through non-formal educational programmes already occurs to some extent in the region. However, these programmes tend to support existing school science education through enrichment activities, rather than focus on the population at large, particularly the out-of-school youth, adults and educated section of the populace.

For the promotion of public understanding of science and meeting the specific learning needs of the different target groups in the non-formal sector, attention now needs to be paid to the differing requirements of these clientele groups. The infrastructures for the delivery of 'Science for All' to the out-of-school sector are generally not available, and wherever they exist, they need to be strengthened. The development and provision of teaching and learning materials for science and technology in the non-formal system has been minimal in most countries. The attempts made so far have been largely on an ad hoc basis in the form of books, posters, films, TV and radio programmes and magazines for the popularization of science and technology and development of scientific literacy.

Some criteria for the selection of content relevant for the NFE in science and technology has been set by a Regional Meeting on 'Science for All' in 1983 (See report 'Science for All', ROEAP, Bangkok 1983, p. 20-21).

The purpose of activities included under this programming action is to promote the development of learning/teaching and training materials for use in extension programmes for developing scientific and technological literacy and for promoting public understanding of science and technology.

Specific objectives:

1. To identify and utilize the resources already available for 'Science for All', both personnel and materials, in the formal school system and extend their use in the non-formal system.
2. To identify and utilize the expertise and facilities of the local community, the extension offices of pertinent Ministries and NGOs;
3. To prepare an inventory of innovative projects and case studies on public understanding of science and technology;
4. To propose guidelines and strategies for development of activities focused on popularization of science and technology, improvement of the learners' living conditions, help them acquire basic scientific and technological skills (for livelihood, survival purposes in the modern world).
5. To prepare a variety of learning materials in science and technology that are designed to provide the learners with basic scientific and technological literacy that will help improve their living conditions and the quality of their life.

Target groups:

Out-of-school youth and adults

Special considerations:

Rural population; women and children; disadvantaged groups

Activities:

See below.

Activities (STE/6)

No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
STE/6.1	Inventory of learning materials appropriate for NFE	6 months	collection through proforma (from ACs)	Staff in MoE, curriculum centres/units responsible for developing such materials	Inventory
STE/6.2	Inventory of exemplars of expertise and facilities in local community, extension offices, etc.	6 months	collection from extension offices, local communities through actual visits/mail	Staff in Ministries responsible for such materials with the NDG or one of the ACs acting as secretariat to consolidate information	Inventory
STE/6.3	Short case studies of projects on public understanding of science	6 months	case studies and synthesis through consultant	teams of specialists engaged in similar work	Portfolio of case studies and their synthesis
STE/6.4	Developing of guidelines and strategies for preparing S & T materials for use in extension programmes for various target groups	2 weeks	TWG (regional)	specialists from selected projects & resource persons	A manual of guidelines & strategies
STE/6.5	Exchange of experiences	2 weeks	inter-country, inter project study visits with field seminar	project leaders	Exchange of experiences, suggestions for improving projects
STE/6.6	Development of exemplar S & T materials for NFE	2 weeks	regional writing workshops (2-1 for print media & other for electronic media)	S & T curriculum developers, teachers subject specialists, media specialists, science writers	Exemplar learning materials and multimedia packages
STE/6.7	Support for national level activities for development of materials and media-packages	2 weeks each	national level workshops/writing groups	–do–	learning materials suited to local needs

Note: The activities proposed above will be closely linked with some of those proposed under Programming Action B.2.

Programme area: Science and technology education including science for all

Action programme: STE/7 Development and strengthening of delivery systems for out-of-school target groups through training of personnel for out-of-school scientific activities and mobilization of expertise and resources

Purpose:

The promotion of public understanding of science and technology and development of scientific literacy for out-of-school target groups through non-formal education programmes already occurs to some extent in the countries of the region. For this purpose, the use of mass media, particularly radio and TV, and print media such as special sections in newspapers, science magazines and books, posters, films are being used to varying degrees.

The major problem is that the number of potential clients in this non-formal sector are clearly out-pacing the provision of effective programmes. Another problem is the shortage of 'software' for certain media, and thus there is a dependence on imported programmes. Science fairs, science exhibitions at the national and provincial levels and establishment of 'Museums of Science and Technology' and 'Science Centres' is another attempt for the popularization of science and technology. In all the above, the lack of trained manpower to implement the programmes has been recognized as a major constraint. The major need therefore, is to develop the necessary trained manpower for implementing the various programmes for the public understanding of science and technology and development of scientific literacy on a much wider scale.

The purpose of this programming action is, therefore, concentrated to enable APEID to help the Member States to share available experiences in the field of promoting the training of necessary personnel for various different out-of-school scientific activities with a view to facilitating the extending of the programmes for the promoting of public understanding of science and technology, its applications and implications, and development of scientific literacy through broadening of the information base and co-operative development of training programmes and training materials for different categories of science extension workers and software developers.

Specific objectives:

1. To inventory the various on-going innovative projects focused on training of personnel engaged in out-of-school scientific activities.
2. To develop training manuals for use in different training programmes for extension workers;
3. To propose guidelines and strategies for development of facilities and activities focused on training of personnel;
4. To promote training programmes to prepare a cadre of specialists e.g. science writers, media software developers, science museum staff, science club and science fair organizers, for different out-of-school science and technology literacy and popularization programmes.

Target group:

1. Staff of projects engaged in popularization of science and technology;
2. Media software developers;

3. Science club sponsors and science fair organizers, science teachers and curriculum developers;
4. Science and technology museum staff.

Special considerations

Needs of the rural population, girls and women, and harnessing of resources available under various ministries engaged in community development programmes.

The focus of the training programmes will be to train specialists for developing software and organizing programmes for public understanding of science and its interaction with technology and society through the applications and resulting implications of technology.

Activities:

See the following pages.

Activities (STE/7)

No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
STE/7.1	Inventory of innovative training projects	6 months	collection from MoEs, S&T development organizations and selected ACs	staff responsible for such projects	inventory
STE/7.2	Case studies of innovative training programmes	6 months	short case studies and their synthesis	teams of specialists engaged in training programmes	portfolio of case studies along with their synthesis
STE/7.3	Development of guidelines and strategies for various training programmes	2 weeks	technical working group meeting	specialists engaged in various training programmes and development of software for various media	guidelines and strategies and follow-up programmes
STE/7.4	Training of science writers	2 weeks	regional workshop	science writers for newspapers and magazines, research scientists, media specialists	a cadre of science writers new insights and skills
STE/7.5	Training of staff of science museums	2 weeks	regional workshop	staff of science and technology museums	a cadre of specialists with new insights and skills
STE/7.6	Exchange of experiences for museum staff	3 weeks	inter-country/ inter-project study visits and field operational seminar	staff of S&T museums	exchange of experiences
STE/7.7	Training of science club sponsors and science fair organizers	2 weeks	regional training workshop	science club sponsors, and science fair organizers	a cadre of trained specialists
STE/7.8	Support for national level training activities	2 to 3 years with each training activity of 2 weeks	national workshops	national staff engaged in various out-of-school scientific activities	training materials and a cadre of trained people at national level
STE/7.9	Training in specific skills	2 to 3 weeks	attachments/internships	personnel engaged in out-of-school scientific activities	improved/skills and insights

Note: The above activities will be closely linked with those proposed under Programming Action STE/B.1.

Programme area: Education for the future and "futures" studies (EDF)

Trends and issues

The rate of technological and socio-economic changes has accelerated dramatically this century and the impact of these changes is felt throughout the world more immediately than even before. 'Futures' studies attempt to examine such issues and to increase man's capacities to adapt to change and to influence change.

Specific objectives:

1. To investigate ways of increasing societies' capacities to adapt to and accommodate technological, social and economic changes.
2. To determine ways of promoting the capability of members of society to make choices or to take initiatives which will shape the future for the benefit of the society.
3. To consider ways in which the above objectives can be incorporated into school curricula in order to alert young people and prepare them for more active contribution to shaping their future.

Purpose:

The activities in this area are aimed essentially to develop open attitudes and to foster a climate in which societies/communities are not merely reactive to change, but can also be instrumental in shaping the future and influence the nature of change.

Target groups:

Educational planners, scientists, administrators, curriculum developers.

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Programme area: Education for the future and "futures" studies

Action programme: EDF/1. Futures studies in education

Purpose:

The main purpose of this activity is to increase awareness on the part of national policy makers, administrators and curriculum developers regarding the importance of futures studies and their implications to education. It is also intended to strong then the knowledge and skills in designing and making futures studies.

Specific objectives:

1. To prepare national case studies on futures studies;
2. To develop prototype materials for inclusion of futures studies in the curriculum; and
3. To develop prototype curricula content, materials, and evaluation processes related to futures studies.

Target groups:

Policy makers, administrators, supervisors and curriculum developers.

Special consideration: –

Expected outcomes:

See the following pages, last column.

Activities:

See below.

Activities (EDF/1)

Activity No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
EDF/1.1	'Futures' studies in education (1) (future scenario)	1 year	Preparation of national case studies	Educational planners, administrators, scientists, curriculum developers	National studies for use at regional and national workshops
EDF/1.2	Regional workshop	1 week	Regional Workshop	Educational planners, administrators, curriculum developers	1. Identification of common trends and distinctive features of socio-economic and technological changes. 2. Compilation of prototype materials to assist countries in curriculum innovation. 3. Compilation of prototype training materials and programmes relevant to socio-economic and technological changes.
EDF/1.3	National workshops for development of prototype materials	On-going	National workshops	Curriculum developers, educational planners.	Prototype curricula and materials, evaluation instruments.
EDF/1.4	Development of curriculum suited to socio-economic and technological changes in the future	On-going	National Workshops	Curriculum developers, teachers	Prototype curriculum and materials for national or local use.
EDF/1.5	Monitoring technological development and corresponding changes in curriculum and materials	On-going	Regular communication using new systems (new information technology)	Selected group of experts	Evaluation of changes in curriculum and methods, and their impact.

Programme Area: Restructuring secondary education (RSE)

Trends and issues

The context within which secondary education is now taking place has changed dramatically. The changes which have taken places determined efforts to move away from traditional to more innovative approaches; from passive to more active methods and techniques; from indifferent to a more purposeful orientation. No longer is education seen as an imposed alien influence. It is indeed actively sought because education has been deliberately linked with development. Education has now a purpose and this purpose is largely self determined.

Each country now has to formulate objectives, and curricula for secondary education within the overall frame of its national objectives of development. But while it is imperative that secondary education must cater to the emerging needs of the society, it must also respond to the developments that take place in other parts of the world, particularly in the region. While providing for an indigenous system of education, it should take into account the fact that modern means of communications have made the world a global village. It would be difficult, to think of any system in isolation. Secondary education has, therefore, to cast itself in a mould which is flexible and not too oblivious of what is happening elsewhere, more so in the neighbourhood.

It is recognized that education influences and is influenced by, the rapid scientific and technological advances which are taking place in the countries of the region. Unless growth takes place in education through the introduction of innovative practices and the development of alternative objectives, the people of Asia and the Pacific will not be equipped to meet the challenges of the coming years.

Once that premise is accepted, it becomes easier to accept that developments like computer-aided instruction, open learning system, undifferented curricula for rural-urban and male-female population, inter-disciplinary approaches to teaching, integration of education and work, and the establishment of a value system which would promote international understanding, peace and harmony, will become some of the important components of secondary education in the coming years in all countries.

Purposes

The main purpose of actions to be undertaken under this sub-programme is to promote the development of co-operative efforts of the Member States through bringing existing resources and developing additional resources to enable the countries to restructure their secondary education and reorganize secondary curriculum relevant to societal requirements, so that the tasks required of secondary schools in carrying out the roles designated above will be achieved. Special attention must be given to the preparation of all students for a satisfying creative life, contributing to the growth of a humane, caring and prosperous society.

Specific objectives

The objectives of secondary education designed to provide desirable characteristics of human resource should aim at the development of skills, values and knowledge as follows:

1. Development of the skills of learning and living to:
   a) develop the ability to communicate;

b) encourage the urge to enquire;

c) gain personal satisfaction through effort in learning and accomplishment;

d) develop an appreciation of problem solving methods; and

e) help people to develop their ability to respond to experience in creative, inventive and considered ways.

2. Development of appropriate values such as to:

a) become self-reliant and to develop a sense of responsibility for personal and group actions in ways that show care and consideration for others (e.g. respect for the law);

b) accept the right of individuals and groups to be different providing they do not impinge excessively on the rights of others;

c) help students to develop a sense of personal identity and self-worth; and

d) help people contribute to society in a meaningful, productive and satisfying way by preparing them to enter the world of work and adult life.

3. Provision of the knowledge required for a satisfying and as a basis for further education to:

a) develop an awareness of the factors of their non-living and living surroundings;

b) help people to develop and appreciation of the contribution that the arts and technologies have made to the lives of people;

c) provide experiences of the arts and science appropriate to the community;

d) develop in students an understanding of their nation, their culture, history and way of life;

e) help people to develop an understanding of people from other countries and cultures and their relationships with them; and

f) develop their understanding of human dependence on natural and man-made environments, and responsible attitudes to the use of resources.

To make secondary education respond to the above objectives and to be relevant to the needs of individuals as well as societal needs, restructuring of secondary education is needed. In this connection, the specific objectives of this programme area will be as follows:

1. To prepare inventory/portfolio of studies on the relevance of secondary education to societal requirement;

2. To develop alternative models and guidelines for their development and implementation;

3. To develop a design of joint innovative project and guidelines and strategies for undertaking the project; and

4. To develop and implement effective strategies for raising the quality of learning of secondary school students.

Target groups

The broad target groups to be covered under various proposed programming actions will be:

1. School going population; and
2. Non-formal secondary education group.

The two main groups outlined above includes (1) those who are attending and (2) those who might have left early and those who cannot attend formal schooling.

Special consideration, if any:

1. The needs of rural areas and girls and women;
2. The needs of countries with different ecologies and environment, ethnic groups, sub-culture, traditional values, local languages, small island states; and
3. Linking secondary school learning to real-life needs of various target groups.

Monitoring and evaluation

The general guidelines provided under Major Programme Area: Education for all for this purpose will be equally applicable to this programme area also. In addition, wherever necessary, detailed evaluation and monitoring procedures and tools will be designed for each specific activity/programming action.

Structuring of the programme area

In view of the secondary education objectives and the needs for restructuring of secondary education in the region specified the above, the programme action under this sub-programme has been presented into two sections:

1. Development of alternative models to increase the relevance of the secondary education and
2. Joint innovative project on raising the quality of learning of secondary school students.

Programme area: Restructuring Secondary Education

Action programme: RSE/1. The development of alternative models to increase the relevance of secondary education responsive to societal requirements.

Purpose

Past emphasis in restructuring secondary education was partly focused on the introduction of vocational courses into the secondary curriculum. Many countries in the region have recognized the inadequacy of this approach. A concern for broader changes and new models for secondary education has now emerged in several countries in the region which have been planning changes in the secondary education cycle.

These countries involved in the development of new emerging models in the secondary education could establish a network of centres and projects aimed at developing alternative models to increase the relevancy of secondary education responsive to societal requirements, to suit their critical educational needs, to exchange materials and to jointly develop curricular and exemplar materials so that they could select, choose, and adapt them before use. The sub-programme is thus aimed at joint development of the emerging alternative models of secondary education by the participating countries.

Specific objectives

1. To develop the outline of new structures and guidelines for the implementation of new structures and curriculum frameworks.
2. To develop and try-out pilot institutions, or pilot wings within existing secondary schools and also develop curricular and instructional materials.
3. To help set up new types of secondary education institutions.
4. To develop teaching and learning strategies suited to new curriculum.
5. To evaluate the new curriculum models and promote innovations in secondary education in the countries.

Target groups:

1. Curriculum developers, researchers, teachers, supervisors;
2. All school going population;
3. Non-formal secondary school population; and
4. Policy makers and school administrators.

Expected outcomes:

1. critical review on the development of alternative models for secondary education
2. synthesis of experiences on designing and developing the relevant curriculum responsive to changing societal requirements
3. manpower build up of trained personnel with innovative, research oriented capacities.

Special considerations:

- population in rural areas and other disadvantaged groups
- countries with different ecologies and environments, ethnic groups, sub-culture, traditional values, local language and small island states.

Activities:

See below.

Activities (RSE 1)

Activity No.	*Activity Title*	*Duration*	*Methods of operation*	*Categories of personnel to participate*	*Expected outcome*
RSE 1/1	Studies of the relevance of secondary education	1 year	Case studies and synthesis	Specialist team	Inventory/portfolio of studies
RSE 1/2	Development of alternative models and guidelines for development and implementation of models and curriculum frameworks	2 weeks	Study group	Team of specialists engaged in the development of new models	Exchange and synthesis of experiences with guidelines for development of new models
RSE 1/3	Development and try-out of models at the national institutions	2 weeks (4-5 countries)	Pilot national workshop	Persons concerned with redevelopment of secondary education	Training programmes/try-out materials cadre of experienced personnel
RSE 1/5	Inter-country exchange of resource persons	2 weeks	Exchange of resource persons	National level staff of projects engaged in design and development of secondary education	Development of specific skills and improvement of national projects
RSE 1/6	Attachment	4 weeks	Attachment/exchange of resource persons	–	Further development of specific skills and improvement of national skills

Programme area: Restructuring Secondary Education.

Action programme: RSE 2. Joint innovative project on raising the quality of learning of secondary school students.

Purpose

Secondary education has an important role to serve in accelerating the pace of development of a country. It must meet the needs and aspirations of its people, while at the same time taking note of developments under way in other parts of the world, particularly in the region. Secondary education cannot affort to remain in isolation. The new models of secondary education has, therefore, to be forward looking, to cast itself in a mould which is sensitive to emerging needs of the individual and the community.

In an attempt to restructure secondary education and reorient secondary schools, such efforts have been seen in some member countries as involving:

1. Establishing of connections between schooling and work;
2. Developing a diversified curriculum which matches the developmental needs of adolescents and the goals of communities and the nation;
3. Demand for strong commitment to excellence in facilitating student's intellectual ability as well as helping students to acquire more integrity;
4. Establishing co-ordinated network among and between different educational institutions;
5. Development of decision making ability with focus on problem solving;
6. Creating programme which anticipate a perspective future;
7. Harmonizing unity versus diversity in educational provisions; and
8. Promoting better school life and quality of education.

Secondary education thus is expected to prepare young people to play a full and vital part in their schools and society.

The main purpose of the joint innovative project is to develop educational programmes focused on the raising of the quality of learning of the secondary school students suited to the changing context of developing societies.

Specific objectives

1. To develop jointly an innovative project aimed at raising the quality of learning of secondary school students;
2. To develop jointly guidelines for national studies, monitor implementation and review impact;
3. To establish a network of centres to develop jointly teaching-learning strategies, methods and materials for the secondary school students;
4. To develop skills for improving the preparation, production and use of teaching learning materials for secondary school students;
5. To develop teaching-learning packages, teacher's guide, and training materials including multi-media packages;

6. To develop strategies and progress on the professional support to teachers, headmasters and other educational personnel; and
7. To review and assess the project so as to promote innovations in secondary education in the countries.

Target groups

- Teachers, headmasters, supervisors, educational administers and students;
- All school-going population;
- Non-formal secondary school population;
- Policy makers and school administrators.

Expected outcomes

1. Creation of planning meeting to review existing situations of secondary education, develop design of activities, prepare guidelines for studies, monitor implementation and review impact.
2. Guidelines for national studies on raising the quality of learning of secondary school students.
3. Synthesis of national studies on innovative programmes and projects.
4. Development of skills for improving the preparation, production and use of teaching-learning materials for secondary school students.
5. Development of teaching-learning packages, teachers' guides, and training materials including multi-media packages.

Special considerations, if any

- population in rural areas and other disadvantaged groups.
- countries with different ecologies and environment, ethnic groups, sub-culture, traditional values, local language and small island states.

Activities:

See the following page.

Activities (RSE 2)

Activity No.	*Activity Title*	*Duration*	*Methods of operation*	*Categories of personnel of participate*	*Expected outcome*
RSE 2/1	Development of design for joint innovative project on raising the quality of secondary level students	2 weeks	Planning meeting	Specialists from ACs engaged in joint innovative projects	Guidelines and strategies and a plan of joint innovative project
RSE 2/2	National studies	6 months	National R and D activities	Specialists of ACs engaged in task	National studies along with their synthesis
RSE 2/3	Synthesis of countries experiences in national studies	2 weeks	A synthesis meeting	Specialists from ACs engaged in joint innovative project	Exchange of experiences on studies and training in specific skills
RSE 2/4	National workshops for development of strategies for raising the quality of learning of secondary school students	2 weeks	National workshops	Persons concerned with JIP and re-development of secondary education	Development of strategies critical analysis and review of strategies
RSE 2/5	Inter-country, inter-project study visits	4 weeks	Inter-country, inter-project study visits	Specialists engaged in JIP	Development of specific skills and improvement of projects
RSE 2/6	Review and evaluation meeting	2 weeks	Finalization meeting	Specialists engaged in JIP	Finalized report and guideline for development and improvement of secondary education
RSE 2/7	Follow-up action	4 weeks	Advisory services	Specialists engaged in JIP	Evaluation report

Programme area: Morals and values education (MED)

Trends and issues:

In recent years most countries in the Asia and the Pacific have shown a great deal of interest in moral education. The question of whether schools have a role in moral education has been frequently raised; more and more it is being answered affirmatively. The question is no longer *if* we should begin systematic moral education but *how* to do it.

Several issues on moral education have been identified. One of the fundamental difficulties is related to the very concept of moral education itself. For example, while in some countries moral education is imparted exclusively in terms of civic values, in some other it is synonymous with religious education. Another issue often raised by many countries is the dichotomy between moral precept and moral practice. Even the best planned moral education curricula fail in achieving their objectives because of the contradictions inherent in the environment of which school is a part. There is also a conflict between traditional values and modern life style. Traditional cultural values have had little time to adjust to certain attributes of modernization. Planners of moral education curricula then are faced with the problem of identifying values and character traits that will best equip the individual to take his place in modern society. In the area of curriculum and instruction the issues are whether moral education should be taught as an independent subject or an integrated subject and whether direct preaching or indirect approaches such as the use of discussions, case studies, models and analysis of situations should be employed. There are many other issues which are of interest and would require further research studies and exploration.

The Ninth Regional Consultation Meeting of APEID, while identifying 17 basic issues of moral education, noted 'Promotion of Moral Education' as one of the significant new demands. There has been increasing urgency to develop innovative instructional strategies in this field.

In the primary curriculum study of the region initiated by the National Institute for Educational Research, Tokyo (NIER), moral/religious/values education was one of four crucial problem areas in the 17 participating countries of the study. The report published in 1986 in Tokyo pointed out several common problem areas of moral/values education and they are, amongst others:

1) There is a lack of unanimity among perents, teachers and moral education experts in the selection of content and preparation of learning materials;

2) The content of textbooks in other subjects often contradicts what is given in the moral education texts;

3) Teachers of moral education do not receive any special training and this results in poor understanding of the concepts of moral education and of appropriate teaching techniques;

4) Lack of suitable test instruments has made it difficult to evaluate pupils' performance in moral education.

It is quite evident that there is an urgent need in the region to introduce new ways of teaching morals and values both in formal and non-formal settings.

Purpose

This programme area aims at supporting national efforts to increase the relevancy, effectiveness and efficiency of moral education as an essential and integral part of the

national educational systems. The aim of this education is to contribute to personal development as well as to national development through the introduction of innovative educational programmes in the teaching of morals and values within the context of the educational systems in each participating member country. Moral and values education may be interpreted as religious and/or civic education where it is formally and officially introduced into educational programmes.

Specific objectives

The objectives are:

1) To develop a common understanding on the values pertinent to the society;
2) To promote studies and exchange of experiences relating to the provisions of moral/values education within educational systems;
3) To explore innovative ideas, tools and methods for instructional strategies (curriculum, materials, methods, etc) of moral/values education for enhancing relevancy and effectiveness of moral/values education; and
4) To develop, in particular, means and tools to assess behavioral changes of learners.

Target groups

School teachers; curriculum developers; educational administrators; policy-makers; parents; community people; students and learners.

Action programmes

1) Co-operative study on the morals/values taught at school and in the community.
2) Co-operative study on the methods and materials of morals/values education in formal and non-formal settings.
3) Joint innovative project on the evaluation methods used in moral education.
4) Research on cultural and arts materials to be used for moral and values education.

Programme area: Morals and values education.

Action programme: MED/1 Co-operative study on the morals/values taught at school and in the community.

Purpose

Rapid social change in contemporary society affects to a large extent the moral values and norms of people and make it difficult to carry out moral/values education within educational systems, both formal and non-formal. In particular, differences of value consciousness between younger and old generations, gaps between traditional values and modern life styles, discrepancies between socially approved values and hidden or implicit values, are increasingly evident when changes in socio-economic structures and rapid development in science and technology directly influence the lives of people. This project aims at promoting effective moral education by means of examining differences in the moral attitudes and values held by different groups in society and in working out ways in which these differences may be reduced.

Specific objectives

1) To examine and identify the "gap" in values between generations, between school and community, and between overt (consciously held) and covert (implicitly held) values.
2) To try to find the ways and means to lessen these gaps.

Target groups

Teachers; supervisors; curriculum developers, researchers with strong background in sociology and anthropology, students and learners, members of the community.

Linkages

Universalization of primary education; education for the world of work; education for rural development; curriculum development.

Activities:

See the following page.

Activities (MED/1)

Activity No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
MED 1/1	National case study	1-2 years	Regional meeting	Teachers, supervisors, curriculum developers, researchers with background in sociology	National case study reports
MED 1/2	Examination of outcomes of national case study reports	2 weeks	Regional meeting	Those who are responsible for conducting national case studies	Guidelines to compile regional reports
MED 1/3	Compilation and dissemination of information obtained through the two activities mentioned above	continuing	Editorial work	ACEID staff	Series of reports

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Programme area: Morals and values education.

Action programme: MED/2: Co-operative Study on the Methods and Materials of Morals/Values Education in Formal and Non-formal Settings.

Purpose

The intention in providing moral/values education is to help individual learners internalize desirable values and to make changes in their styles of behaviour, but not to make learners memorize norms or moral precepts. In order to achieve this intention it is imperative to develop instructional methods and materials, particular to moral education and distinguishable from methods and materials which are effective for teaching lower level knowledge and skills.

In addition, it is widely understood that moral education should not be undertaken merely in lessons devoted to moral education but also through lessons in which other subject matter is taught and in other educational programmes in educational settings. This integrated approach to moral education is less common. This project aims at developing instructional methods and materials, including the means to integrate moral education with other subject areas, which are distinctive to moral education.

Specific objectives

1) To examine cross-nationally the state of the art regarding teaching methods and materials of moral education in formal and non-formal settings in the region;
2) To devise innovative methods and materials for internalizing certain values;
3) To explore means of integrating the teaching of morals and values in subject areas other than separate moral subject matter;
4) To exchange information and experiences gained through national experiments;

5) To develop prototypes of desirable materials and manuals of teaching methods for wider distribution.

Target groups

Teachers, supervisors, curriculum developers, students and learners.

Linkages

Universalization of primary education; curriculum development.

Activities:

See below.

Activities (MED/2)

Activity No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
MED/2.1	Study the state of art regarding teaching methods and materials of moral education	2-3 weeks	Regional workshop	Specialist teachers, supervisors, curriculum developers	Workshop report, guideline for national experiment
MED/2.2	National experiments for developing new ways of conducting of moral education	2-3 years	National experiment	Teachers, supervisors, curriculum developers, students and learners	Experiment reports, teaching materials and methods found to be useful
MED/2.3	Inter-country study visit/attachment to the sites of the national experiment mentioned above	continuing	Study visit/attachment	Teachers, supervisors, curriculum developers	Study visit/attachment reports
MED/2.4	Regional Synthesis Workshop on the outcomes of national experiments	2-3 weeks	Regional workshop	Specialists involved in national experiments	Workshop report
MED/2.5	Regional workshop for developing prototypes of innovative materials and preparing teachers' manuals for innovative methods of teaching	3-4 weeks	Regional workshop	Specialists involved in national experiments	Workshop report, prototype materials and teachers' manuals

Programme area: Morals and values education.

Action programme: MED/3: Joint innovative project on evaluation methods in moral education.

Purpose

Moral education aims at changing the learner's behaviour but it is widely known that the measurement of such behavioural change is very difficult. Moral education therefore often tends to be a mere conveying of knowledge about moral values and the evaluation of moral education tends to be confined only to the cognitive aspect, which in turn makes moral education less effective and does not capture the learner's interest. In order to overcome this shortcoming, this project aims at studying evaluation methods especially suited to moral education, and particularly to its affective and psycho-motor aspects, thus contributing to the effective conduct of moral education.

Specific objectives

1) To examine the means of evaluation currently used in moral education;
2) To exchange information on the means and tools of evaluation for moral education in participating countries;
3) To experiment with different ways of assessing the achievement of moral education with special emphasis on the affective and psycho-motor.
4) To disseminate the outcomes of the project.

Target groups

Teachers, supervisors, curriculum developers, researchers with a strong background in psychometrics, testing and evaluation, students and learners.

Linkages:

Universalization of primary education; curriculum development; research and development including measurement and evaluation of programme.

Activities:

See the following page.

Activities (MED/3)

Activity No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
MED/3.1	Planning the project	2 weeks	Regional meeting	Those responsible for undertaking JIP	Plan of actions
MED/3.2	Examining the current state and devising evaluation instruments suited moral education	1-2 weeks	National workshop	Teachers, curriculum developers	National study reports, guidelines for national experiment
MED/3.3	Examination of practices in moral education and its evaluation	Continuing	Study visits	Specialist teachers, curriculum specialists, supervisors	Study visit reports
MED/3.4	Testing the use of innovative instruments for evaluation of moral education	1-2 years	National experiment	Teachers curriculum developers, students and learners	Experiment report
MED/3.5	Synthesis and analysis of the outcomes of national experiments (Finalization Meeting of JIP)	2-3 weeks	Regional workshop	Those responsible for JIP	Workshop report

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Programme area: Morals and values education.

Action programme: MED/4: Research on Cultural and Arts Materials to be used for Moral and Values Education.

Purpose

The Ninth Regional Consultation Meeting pointed out that the basis of any education system is the preservation and promotion of cultural attitudes and values within the community and urged that a more detailed plan of action be considered during the fourth cycle of operation. While discussing moral values to be conveyed to the next generation, it was clearly recognized that cultural and arts materials in the community will be one of the most relevant resources for moral education. Since there are no actions being taken to develop inventories of cultural and arts materials in the region (which was suggested by the 9th RCM), this project is proposed to be conducted under EDSOC/6/MORED.

Specific objectives

1) To survey cultural and arts materials to be utilized as the resource materials for moral and values education;

2) To develop national as well as regional inventories of cultural and arts materials proved effective for moral and values education;

3) To compile regional resource book on cultural and arts heritages for moral education.

Target groups:

Students and learners, parents, members of community.

Linkage

Cultural Division, ROEAP.

Activities:

See below.

Activities (MED/4)

Activity No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
MED/4.1	Identification and location of cultural and arts materials relevant to moral/values education	1 year	National survey	Experts in moral education and in culture and arts	National inventory, national resource book of cultural and arts materials relevant to moral education
MED/4.2	Examination of national inventories and resource books	2-3 weeks	Technical working group meeting	Specialists from selected countries	Guidelines for compilation of regional inventory and resource book
MED/4.3	Compilation of regional inventory and resource book	Continuing	Compilation	ACEID staff	Regional inventory and resource book

Programme area: Special education (SED)

Trends and Issues

Many countries in the region are addressing for the first time the question of making special educational provision for disabled children and gifted and talented children. Before this, in many countries limited numbers of the former group have been catered for by charitable and private organizations or institutions. In recognition of all children's rights to education and in keeping with the press for universalization of primary education, education systems are acknowledging their responsibility to establish or extend special education provisions. Likewise, in the case of gifted and talented children, many countries are becoming increasingly committed to the identification of, and appropriate educational provision for students who have superior intellectual ability and/or special talents in creative or physical areas – such as music, the performing and creative arts, sport – for both individual and societal benefit.

Furthermore, in recent years there have been several programmes under a variety of auspices and supported by different funding sources in the region. Whilst some of these projects have been recognised as mutually supportive and key workers in individual countries have been able to make links there is a need to review and, where appropriate, integrate such programmes in the interests of consolidation of effort and avoidance of duplication.

In this document the two action areas of special education will be treated separately:

1. Special Education for *disabled children.*
2. Special Education for *gifted and talented children.*

Programme area: Special Education.

Action programme: SED/1: Special education for disabled children.

The term 'disabled children' includes those with intellectual deficits, physical or sensory impairments, significant emotional and behavioural disorders and specific learning difficulties.

Before effective educational provisions can be made available and accessible to all disabled children increased community awareness and understanding are essential. In some societies or cultures the presence of a handicapped child within a family still carries connotations of shame and guilt which may inhibit such a child's participation in his local community.

From looking at well established special education policies and practices in other countries some developing countries are anxious to avoid setting up highly segregated provisions but rather to adopt current practices of mainstreaming or integration to meet the needs of as many disabled children as possible within ordinary schools and classes*.

Many new demands are thus being made of teachers and, as a consequence, new developments are needed in teacher training at both pre-service and professional development levels*.

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* It is possible that joint innovative projects with other programme areas (e.g. UPE) with special reference to mainstreaming/integration and teacher training could be conducted.

The role of parents in their children's education is increasingly recognized and respected generally. In the case of children with disability this should be specifically acknowledged in the establishment of co-operative parent-teacher (and if appropriate – paramedical) involvement in early (pre-school) special education services and in on-going parent guidance programmes.

Finally the impact of new technologies, particularly in computer assisted communication systems for physically and sensorily disabled people, calls for considerable innovation in education practice.

Activities:

See below.

Activities (SED/1)

No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to participate*	*Expected Outcome*
SED/1.1	Identification and cross-referencing of existing special education programmes	6 months	National studies	• National specialists, administrators • Unesco, UNICEF, SEAMES, ADAB, NISE (Japan) etc.	Classification of programmes showing origins, delivery authority and funding sources – in preparation for Regional Planning Meeting
SED/1.2	Review and integration of special education services (Refer Activity (1) above)	1 week	Regional Planning Meeting	Senior special education administrators	Recommendations for and models of co-operation and integration
SED/1.3	Workshop to share ASEAN sub-regional special education project experience and outcomes with other countries	2 weeks	Regional Workshop	One representative of each ASEAN country's special education project team Special education planners and supervisors from other countries	1) Guidelines for surveys of incidence and need and for assessment; 2) Recommendations for curriculum and teacher training; 3) Strategies for increasing community awareness and understanding
SED/1.4	Increasing skills in educational assessment, curriculum development, teaching methodologies	on-going	National workshops/ study visits/mobile teams	Special education supervisors, school principals, teachers	To establish and consolidate pools of resource persons, experts at national levels

Programme area: Special Education

Action programme: SED/2: Special education for gifted and talented children

The term 'gifted and talented' has gained currency in recent years because it indicates that there are various ways in which children's superior abilities and skills in specific areas manifest themselves. There are children of very superior general intelligence, often referred to as gifted, and those who display exceptional aptitude and facility in, for example, music, sport, and the creative or performing arts, who might be singled out for special encouragement, enrichment and/or individual learning opportunities.

One major problem, whatever the strategies adopted to provide adequately for their needs, is that of school and teacher-based identification of gifted and talented children. In developing countries the services of educational psychologists for assessing and confirming levels of intellectual functioning are not generally available. Teachers need checklists and observation guidelines to help them identify children for whom the regular classroom provisions might be insufficiently challenging and stimulating.

Joint innovative studies and inter-country visits to share policies and practices with regard to time and nature of intervention are essential.

Activities (SED/2)

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
SED/2.1	Development of screening devices for teacher-based identification of gifted and talented children	On-going	National and regional workshop/ trialling of instruments	Curriculum developers, psychometricians, teachers		Screening device, checklists, observation guidelines
SED/2.2	Development and evaluation of strategies for gifted and talented children	On-going	Sub-regional workshops/inter-country visits/joint innovative studies	Policy-makers, curriculum developers, and teachers	Bulletion	New policies and practices in meeting the needs of gifted and talented children
SED/2.3	Development of educational packages	On-going	National workshops/ regional workshop	Curriculum developers, teachers and instructional systems specialists		Learning materials for extension and enrichment

MAJOR PROGRAMME AREA: SUPPORTING ACTIVITIES AND INFRASTRUCTURES COMMON TO ALL EDUCATIONAL LEVELS AND SYSTEMS

Programme Area:	Research and development including measurement and testing (RED)
RED/1	– Joint Innovative Study of reform national entrance examination system and practices
RED/2	– Joint Innovative Study on the contributing factors for raising retention rate of primary school children
Programme Area:	Curriculum development (CUD)
CUD/1	– Curriculum development for UPE and non-formal education
Programme Area:	Training of personnel including professional support services (TEP)
TEP/1	– Analysis of teacher education survey and development of alternative structures and training methodologies
TEP/2	– Development of exemplar materials for training of educational personnel
TEP/3	– Design for use of para-professional personnel for teachers training
TEP/4	– Development of networks of institutions for pre-service and in-service training of educational personnel
Programme Area:	Educational technology and information technology including production of reading materials and low-cost teaching aids (EDT)
EDT/1	– Development of instructional technology, using new media, self-learning and group work aiming at self-development of learners
EDT/2	– Promotion of educational use of information and communication technology
EDT/3	– Development of appropriate technology, and promoting the production and distribution of instructional materials, low-cost teaching materials and equipment
EDT/4	– Development of computer literacy programme within the framework for general education and teacher training programme
Programme Area:	Distance education (DED)
DED/1	– Parity of esteem
DED/2	– Using distance education for strategic development tasks

MAJOR PROGRAMME AREA: SUPPORTING ACTIVITIES AND INFRASTRUCTURE COMMON TO ALL EDUCATIONAL LEVELS AND SYSTEMS

Rationale:

The success of all educational programmes depends not only on good planning and management but also on supporting activities which will facilitate the continuing improvement of the programmes.

Current status:

The last two decades have seen remarkable changes in education in many participating countries. In the efforts to provide education for all, some countries have attained universal primary education, several are very close to the target and many others are likely to achieve it by the next two decades. Continuing education to provide education facilities and improve the quality of education have been engaged by all member countries in varying degrees. Efforts have also been made to make education relevant to the needs of society as well as the individual, through various educational programmes to be relevant to urban as well as rural areas. In addition most countries are trying to improve the quality of education by strengthening teacher education programmes, providing structures and services for professional support to teachers and other educational personnel, particularly at the local level. Innovations in in-service education of teachers and co-operation among educators and other professionals are also built into the design for improving education.

General issues:

Inspite of all the efforts that have been made, there are some areas of supporting activities which require further improvement. Such supporting activities are in the areas of research and development, curriculum development, personnel training and educational and information technology. The general issues confronting policy makers and administrators is how to carry out these activities effectively. There are problems of training of researchers, establishing network for research agencies and preparing personnel for development and use of educational technology and information technology.

Overall aim:

The overall aim of this major programme area is to increase the level of co-operation among member countries in the regional in order to improve the on-going supporting activities and infrastructures.

Specific Objectives:

To stimulate through regional co-operation, national efforts of the member countries to enchance their capacities in the following areas:

1. Research and development including measurement and testing;
2. Curriculum development for universal primary education and non-formal education;

3. Personnel training including professional support services;
4. Educational technology and information technology including production of reading materials and low-cost teaching aids.

Special consideration:

In all areas special consideration will be given to:

1. Identifying the problems inherent in the subjects in question;
2. Strengthening the capacity and productivity of personnel in the region;
3. Networking of regional agencies for effective co-ordination of work; and
4. Generating and disseminating of viable and feasible information and practices.

Expected major outcomes:

1. Training of researchers and educational personnel in teacher training, curriculum development and development of educational materials;
2. Establishing network of research agencies, teacher training and other training programmes;
3. Developing and disseminating information on innovative experiences and materials related to educational technology, information technology and other training programmes; and
4. More competent researchers, curriculum developers and specialists in test and measurement.

Monitoring and evaluation procedures

Detailed evaluation and monitoring procedures and tools should be designed for each specific activity/action programme. Research studies should be subject to critiques before and after publication. For other activities a built-in evaluation should be adopted.

Programme area: Research and development, including measurement and testing (RED)

Trends and issues:

Participating countries in APEID expressed a keen interest in ensuring that innovations in which they share have sound Research and Development (R & D) basis, and that mechanisms and instruments for measurement and testing are soundly devised and are relevant to their national contexts. Programmes already carved out within the APEID framework demonstrate well that joint research ventures which attempt to pool together expertise and experiences available in the region is a very useful mode. These joint activities have contributed to the preparation of co-operation and collaboration among research institutions and individual researchers of the region, who are attuned to its needs and requirements.

R & D has in the past drawn heavily on models of research from outside the region. Research activities within APEID have helped evolve attitudes and patterns of research on which future research can proceed with clearer understanding of the contexts of the innovations which research will serve. These aspects should be promoted, both in the APEID network and subnetwork arrangements, with focus on research and development.

Important issues in this areas are as follows:

1. Educational innovation for development is dependent on R & D processes, including measurement and testing.
2. Research should be relevant to the contexts in which development will eventually occur (e.g. studies of education and its relationship to socio-economic and cultural development).
3. Joint innovative activities provide fruitful contexts and style for effective R & D.
4. Many programmes which will finally evolve at the national level will be better helped by the relevancy achieved through joint co-operative R & D ventures within the Asia-Pacific region (e.g. a holistic approach to secondary school curriculum reform).

Overall aim:

The achievement of relevant types and styles of research for educational innovation for development through

1) The promotion of joint co-operative studies of major programme areas (e.g. the relationship of education to socio-economic and cultural development, education in the context of science and technology).
2) The establishment of a network of agencies for conducting joint research, including measurement and testing mechanisms.

Specific objectives:

1. To strengthen the capacity and productivity of regional R & D agencies to serve educational innovation for development
2. To identify where R & D can assist educational innovation for development

3. To indicate the relevance of R & D methodologies, developed on a regional basis, to national contexts.
4. To be able to draw generalizations from regional study findings that are relevant to the contexts of participating countries and to particular projects;

Special consideration

LDC's and small countries lacking or with limited organized educational R & D.

Major outcomes:

1. Sub-networks of educational R & D agencies and individual researchers with special interest in the work of APEID.
2. Research studies, jointly conceived and executed, on key issues in educational innovation for development seen in their particular relevance to the cultures and aspirations of countries in the Asian-Pacific region.
3. Increased sensitivity and skill among researchers in taking account in their methodologies of the particular research contexts of Asia and the Pacific.

Monitoring and evaluation:

Measurement and testing components of R & D activities should be taken into account. Research studies should be subjected to critiquing before and after publication.

Programme Area: Research and development including measurement and testing

Action programme: RED/1 Entrance examination systems and practices

Purpose:

To reorientate examinations used for promotion and entrance to advanced-level institutions as holistic of the total curriculum and educational experience, with its scope for character formation and moral development, and thereby reducing the disproportionate emphasis on rote-memorization of factual knowledge; and to alter the motivational basis for student attitudes to examinations.

Specific objectives:

1. To identify the problems inherent in the content of admission procedures and criteria for promoting students to higher stages of education.
2. To analyse the educational and cultural background of these problems and their susceptibility to change
3. To formulate viable and feasible plan for reforming the practices of students admission/promotion to higher stages of education
4. To publish research monographs for effective communication and diffusion of the proposals made by the joint-study groups

Special considerations:

Countries with pressure on higher education facilities.

Target groups:

Researchers; policy makers; curriculum developers

Activities:

See the following page.

Expected Sub-programme outcomes:

1. Study monograph to be published providing guidelines for the policy makers and specialists involved in reform.
2. Generation and dissemination of viable and feasible reform plans.

Linkages:

Curriculum development.

Activities (RED/1)

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcomes of activity*
RED/1.1	Design meeting	one week 1987	Workshop	Experts		Guidelines for research proposal
RED/1.2	Study	one year 1987	Survey-research	Researchers and policy makers		Country-report
RED/1.3	Sub-regional* workshops	one week 1988	Seminar and workshop	– do –		Sub-regional report
RED/1.4	Regional conference	10 days 1989	Seminar and workshop	– do –		Regional comprehensive study monograph

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* The participating countries in the project can be grouped into four on sub-regional basis:

- The Pacific countries
- ASEAN and Indo-China countries
- SAARC countries
- Far East countries – China, Japan and Republic of Korea

Programme area: Research and development including measurement and testing

Action programme: RED/2. Contributing factors for raising retention rate of primary school children.

Purpose:

The attrition rate of primary schools, particularly in the first two years is high in many countries in the Asia-Pacific region. Some analytical studies to identify the contributing factors for early drop-outs are necessary to develop policy measures for increasing retention rate of primary school attendance in these countries. In this regard, a joint innovative study on the subject will be mutually beneficial to devise viable and feasible plans/policies to increase retention rate of primary school attendance by sharing experiences and fact-findings of participating member countries in this project. This would also contribute to strengthening the sub-network of research organizations within the framework of APEID in the region and increasing their appreciation of special regional characteristics of research.

Specific objectives

1. To identify the factors/forces affecting the drop-outs in the primary schools.
2. To make an in-depth analysis of the attributing factors involved.
3. To formulate policy alternates and programmes for increasing retention rate of primary school attendance.
4. To improve the capacity of regional research organizations to undertake research in Asia and Pacific contexts.

Target groups

Researchers, Primary curriculum specialists.

Special considerations

This project is more relevant and urgent in the LDCs and remote rural areas.

Activities:

As follows

Activities (RED/2)

No.	*Activity Title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Expected outcomes of activity*
RED/2.1	Design meeting	1 week (1987)	Workshop	Expert in primary education research	Guidelines for research proposal
RED/2.2	Country study	1 year (1987)	Survey-research	National researchers and policy makers	Country report
RED/2.3	Review meeting	1 week (1988)	Proposal review panel	Experts in primary education research	Approval of research proposals
RED/2.4	Study visit	1-2 weeks	Inter-country study	Project Director	Exchange of ideas implemented in country study
RED/2.5	Finalizat meeting	10 days (1989)	Workshop	Project Directors	Comprehensive research monograph

Expected sub-programme outcomes

Research Monograph

Linkage

UPE, APPEAL.

Programme area: Curriculum development (CUD)

Rationale:

Several major thrusts in curriculum development and innovation have been made in Asian countries in recent years. These include improving organizational infrastructure; putting emphasis on rural transformation; promoting equal access to education; promoting broad-based particupation; facilitating the use of low-cost materials and indigenous resources; promoting interlinking of education and productive work; improving science and technology education; and reorienting the role of curriculum developers.

Curriculum development as a specialized activity has been going on in all relevant ACs of the region for nearly two decades. Within the formal system, some ACs have specialized in curriculum development in a particular field, others have established curriculum teams for different fields of study under one institution. Not much work has been done in the area of curriculum work for non-formal education and in particular appropriate links between curricular of formal and non-formal education have not been established for their mutual benefit.

This programme is concerned with establishing a better co-ordination between curriculum development for formal and non-formal education, particularly at the primary education level.

Overall aim:

Establishment of better co-ordination between curriculum development work for formal and non-formal education at the primary level, treating the two streams as an integrated whole, allowing inter-se mobility to participants.

Specific objectives:

1. To review curricula at the primary level of the formal and non-formal systems with a view to identifying possible revisions to enable better provision for the continuing education of primary school drop-outs; and
2. To create better links between curriculum development workers in formal and non-formal settings.

Special considerations:

The participation in this programme may have to be limited to those Member States with fairly well established curriculum development systems for formal and non-formal education.

Major outcomes:

1. Development of regional and national groups linking formal and non-formal curriculum workers.
2. Manual for training curriculum workers.
3. Revised curricula.

Programme area: Curriculum development

Action programme: CUD/1. Curriculum development for UPE and non-formal education

Purpose:

Historically, educational curricula have tended to be developed largely with reference to the concept of educational continuum within the formal system. While framing these, the implications of preparing pupils who might drop out of the educational system at an early age to enter the world of real-life and work have, therefore, not been given due consideration, nor have these received adequate attention.

Enough work has also not been done on the scope, limitations and processes of curriculum development for non-formal and continuing education of children and adults, especially in the context of the envisaged mobility between the non-formal and formal systems of education.

Specific national objectives:

To use techniques of action research for development and evaluation of curriculum in order to:

1. define the curricular needs, with reference to UPE, not only with reference to the educational continuum within the formal system, but also for developing capabilities for entering, with progressively increased competence in clearly specified terms, into real-life and the world of work after various stages (primary, secondary etc.) of education, treating them as terminal stages for a large percentage of learners;
2. define the pre-requisites and lay down the guidelines for development of curricula for facilitating mobility between the formal and non-formal streams of education;
3. develop appropriate curricula for training teachers/ instructors for non-formal and continuing education in the context of their limited abilities and the nature of their clientele and tasks.

Target groups:

1. Educational planners
2. Key workers in curriculum development centres

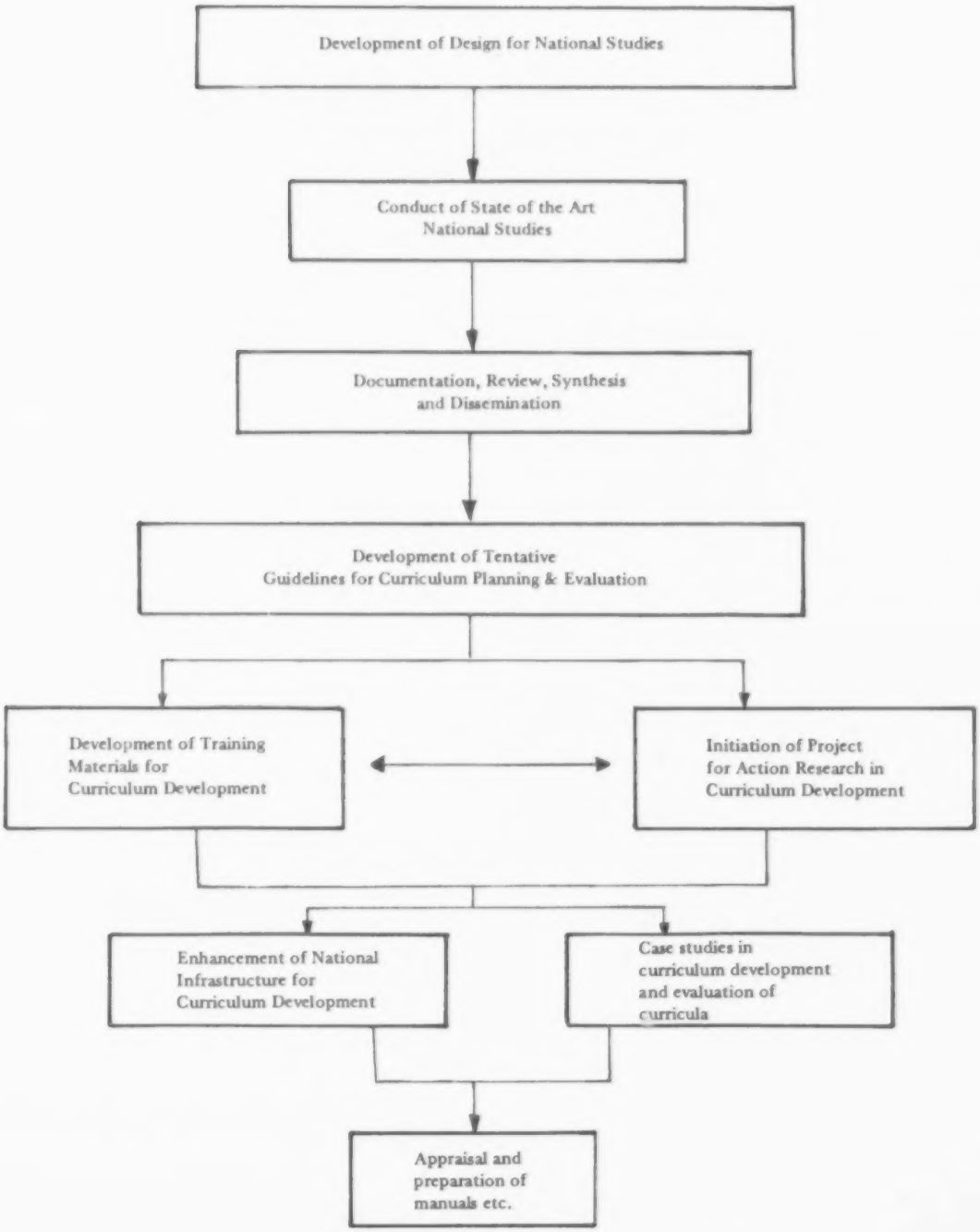
Linkages:

Universalization of primary education.

Activities:

See the following page.

PROCESS OF ENHANCEMENT OF CAPABILITIES FOR CURRICULUM DEVELOPMENT FOR NON-FORMAL EDUCATION THROUGH ACTION RESEARCH


Development of Design for National Studies
Conduct of State of the Art National Studies
Documentation, Review, Synthesis and Dissemination
Development of Tentative Guidelines for Curriculum Planning & Evaluation
Development of Training Materials for Curriculum Development
Initiation of Project for Action Research in Curriculum Development
Enhancement of National Infrastructure for Curriculum Development
Case studies in curriculum development and evaluation of curricula
Appraisal and preparation of manuals etc.

Activities (CUD/1)

Sequential Activity No.	*Activity title*	*Duration*	*Method of operation*	*Category of personnel to participate*	*Expected outcomes of activity*
CUD/1.1	Workshop for development of design for national studies	1 week	Preparation of background material by ACEID	Representatives of ACs and consultants	Design of the study
CUD/1.2	State of the art national studies	6 months	Case studies	Key personnel in ACs	National studies
CUD/1.3	Workshop for analysis, synthesis of national studies	2 weeks	Sub-regional workshop	Same as for Activity 1	Tentative guidelines for curriculum planning and evaluation and design for action research
CUD/1.4	Training in curriculum development and for conduct of Action Research studies	2 years	In-country training to be conducted by participants in Activity 1.2 and launching of action research programme assisted by national consultants	Personnel in ACs for curriculum development for both formal and non-formal	1. Case studies of action research in curriculum development and evaluation 2. Enhancement of insights into and capabilities for curriculum development and evaluation
CUD/1.5	Review meeting on initiation of project for action research in curriculum development				
CUD/1.6	Review and evaluation of action research projects and preparation of manuals	2 weeks	Sub-regional workshop	Same as for Activity 1.1	1. Manuals 2. Evaluation report

Monitoring and evaluation

The design group established for Activity 1.1 may monitor the progress through inter-country visits and obtaining of progress reports at appropriate stages.

The major outcomes listed should facilitate the final evaluation.

Programme area: Training of educational personnel including professional support services

Trends and issues:

Education systems in the regional have undergone enormous changes in the recent past, and even more fundamental reorientation is being planned for the future. The national education systems need to have effective infrastructures for developing, mobilizing and expanding their human resources.

In this context, professional support services and education and training of educational personnel are urgently needed for teacher training institutions, curriculum development centres, educational technology services including resource centres of different types, educational planning and management centres, etc.

Purpose:

The emphasis in this sub-programme area would concentrate particularly on the development of professional support services and training of personnel for design, implementation and evaluation of educational innovations.

Specific objectives:

1. To analyse survey of teacher education undertaken to 1986, develop designs for development of alternative structures and training methodologies and develop plans for different forms of professional support services;
2. To develop guidelines and exemplars for training personnel of different cadres in planning of systems and structures for professional support services;
3. To develop guidelines, methodological manuals and exemplar materials for training of personnel in the delivery of professional support services;
4. To develop the plans for participation of non-teaching staff in school education for training of educational personnel;
5. To promote networks of institutions for in-service as well as for pre-service training of teachers and educational personnel in the member countries.
6. To disseminate information on innovative projects/experiences and materials, including those mentioned above, in all participating countries;
7. To provide resource persons and facility of internship, on request, to facilitate establishment of structures and training of the staff for such structures.

Special consideration:

An important consideration in APEID is to promote access to educational opportunities and facilities for disadvantaged section of the population. In this regard, special emphasis would be given to the least developed countries in Asia and the small Island States. Special attention will continue to be focused on them in APEID within the framework of the technical co-operation network through increased training facilities by attachments and provision of resource persons.

Expected major outcomes: (in global terms)

- Training and orientation of educational personnel in planning and implementing innovative programmes;

- developing materials and techniques and establishing network of teacher training and other training programmes;
- disseminating information on innovative projects/experiences and materials related to training of educational personnel and professional support services.

Monitoring and evaluation procedures:

During the fourth cycle period, the emphasis will be on the development of alternative structures and training methodologies and development of training materials, use of non-teaching staff in school education for training and building up national capabilities in planning, establishing and operating professional support services and training in modalities of delivery of such services and development of network of institutions for in-service training of teachers and educational personnel, including those of teacher training institutions.

Programme area: Training of educational personnel including professional support services

Action programme: TEP/1. Analysis of teacher education survey and development of alternative structures and training methodologies

Purpose:

To strengthen the national initiative to develop alternative structures and training methodologies needed for innovative training programmes

Specific objectives:

To contribute to co-operative efforts in developing alternative strategies and training methodology in the preparation of educational personnel.

Target groups:

Teacher educators and other educational personnel – trainers of non-formal educators and supervisors.

Special considerations:

Special attention to those countries which do not have adequate expertise and provision for continuous improvement in teacher preparation and continuing education.

Activities:

As follows

Activities (TEP/1)

Sequential Activity No.	*Activity title*	*Duration*	*Methods of operation*	*Category of personnel to participate*	*Expected outcomes of activity*
TEP/1.1	Analysis of comprehensive (continuing activities from 3rd cycle)	1987			Series of studies on alternative structures and training methodologies
TEP/1.2	National Workshops	10 days (1987)		teacher-trainers	
TEP/1.3	2 Sub-regional Workshops	14 days each (1988)			
TEP/1.4	Study Group Meeting	1989			Development of guidelines for deternative structures and training methodologies
TEP/1.5	Development of alternative structures and training methodologies – follow-up national workshops	1989			

Expected programme outcomes

1. A series of studies relating to alternative structures and training methodologies;
2. Reorientation of groups of teacher educators and other educational personnel; and
3. Development of guidelines and exemplar materials for training of personnel of different cadres in planning of systems and of structures for professional support services.

Linkages with other programmes:

All the other programme areas, with particular reference to TEP/2 and TEP/4.

Programme area: Training of educational personnel including professional support services

Action programme: TEP/2. Development of exemplar materials for training of educational personnel

Purpose:

To contribute to the development of materials to support the new structures and training methodologies.

Specific objectives:

To facilitate the development of exemplar materials needed for innovative training methodologies and techniques.

Target groups:

Teacher educators and other educational personnel

Special considerations:

Special attention to those countries which do not have adequate provision for continuous improvement in teacher preparation and continuing education.

Activities:

Activities (TEP/2)

Sequential Activity No.	*Activity title*	*Duration*	*Method of operation*	*Category of personnel to participate*	*Expected outcomes of activity*
TEP/2.1	Planning meeting for development of exemplar materials	8 days (1987)			
TEP/2.2	Commissioning national studies on development of exemplar materials	1987			Studies relating to development of exemplar materials
TEP/2.3	Technical Working Group meeting to develop manual on training methods and techniques and other exemplar materials	14 days (1988)			1. Development of manuals of training methodologies and techniques for new skills; 2. Development of exemplar materials.
TEP/2.4	National Workshops	10 days (1989)			
TEP/2.5	Attachment and internship	(1987-91)			
TEP/2.6	Study group on evaluation of development of exemplar materials and training programmes	1991			

Expected programme outcomes:

1. Development of manuals of training methodologies and techniques for new skills;
2. Development of exemplar materials; and
3. Increased responsiveness to innovations.

Linkages with other programme(s):

All the other programme a..as with particular reference to TEP/1 and TEP/4.

Programme area: Training of educational personnel including professional support services

Action programme: TEP/3. Design for use of para-professional personnel for teachers training.

Purpose:

Contributions of persons with specialized professional experience to training of teachers and other educational personnel.

Specific objectives:

To utilize para-professional personnel to train teachers and perform back-up activities in close collaboration with teachers.

Target groups:

Teacher trainers, supervisors and other educational personnel.

Special considerations

Special attention should be given to those countries which do not have adequate expertise and provision for continuous improvement in teacher preparation and the specific needs of small island states should merit special consideration.

Activities:

As follows.

Activities (TEP/3)

Sequential Activity No.	*Activity title*	*Duration*	*Method of operation*	*Category of personnel to participate*	*Expected outcomes of activity*
TEP/3.1	Inventory of para-professional personnel used in Member States	1987			
TEP/3.2	Technical working group meeting on use of para-professional personnel to train teachers and other educational personnel	14 days (1988)			Effective use of para-professional personnel; Effective use of specialists belonging to other professions
TEP/3.3	Sub-regional training workshops on the use of para-professional personnel (2)	1989			
TEP/3.4	Follow-up national workshop	1982-90			
TEP/3.5	Exchange of resource persons				
TEP/3.6	Professional support for the above	1990			
TEP/3.7	Study group on the evaluation of the use of para-professional personnel under APEID project	14 days (1991)			Evaluation report

Expected programme outcomes:

1. Effective use of specialists belonging to other recognized professions;
2. Supplementing shortage of professional teachers; and
3. Development of guidelines for effective use of para-professional personnel for training of educational personnel.

Linkages with other programme(s):

All the other programme areas, with special reference to TEP/1, TEP/2 and TEP/4.

Programme area: Training of educational personnel including professional support services.

Action programme: TEP/4. Development of networks of institutions for pre-service and in-service training of educational personnel.

Purpose:

To increase the inter-country flow of information, experiences, materials through networking of innovative pre-service teacher training and in-service institutions as well as various other allied agencies.

Specific objectives:

To promote networks of institutions for pre-service and in-service training of teachers and educational personnel and networking of teachers training institutions.

Target groups:

Staff responsible for personnel development and support services, curriculum developers, educational technologists, researchers and trainers.

Special considerations:

Special attention should be given to those countries which do not have adequate provision for continuous improvement in teacher preparation and the specific needs of small island states should merit special consideration.

Activities:

Activities (TEP/4)

Sequential Activity No.	*Activity title*	*Duration*	*Method of operation*	*Category of personnel to participate*	*Expected outcomes of activity*
TEP/4.1	Expert meeting on evaluation of materials on in-service training programme and the networking of the institutions	10 days (1987)			Networking of information relating to pre-service and in-service teacher training institutions
TEP/4.2	Follow-up national workshop on development of evaluation materials and the networking	1988			
TEP/4.3	Exchange of resource persons	(one year)			
TEP/4.4	Regional workshop on further development for networking of institutions	14 days (1989)			Utilization of information for innovations in teacher education and networking
TEP/4.5	Symposium on research and development in teacher education and the networking	14 days (1990)			Research and development in teacher education and the networking Evaluation report

Expected programme outcomes:

1. Networking of informations relating to pre-service and in-service teacher training institutions;
2. Utilization of information for innovation in teacher education and training of other educational personnel;
3. Utilization of information from current training programmes and evaluation to develop further exemplar materials demanded of innovative training methodologies and techniques.

Linkages with other programme(s):

All the other programme areas, with reference to TEP/1 and TEP/2.

Programme area: Educational technology and information technology including production of reading materials and low-cost teaching aids. (EDT)

Trends and issues

The problem of lack of resources to meet educational needs is evident in most countries in the Asia and Pacific Region. For the solution of this problem, countries are orienting themselves towards educational technology with special emphasis on the use of new media and innovative instructional materials (including textbooks and printed materials) of high quality and at resonable cost. Creative improvisation and cost-effectiveness remain major considerations in this area, but this does not preclude the use of sophisticated media.

Purpose

To assist those countries in the region whose basic educational facilities and trained manpower are inadequate. The major aim is to maximize the effectiveness of educational methods throughout the region.

Overall objectives

1. To promote the effective use of educational technology methods and new media of communication and information technology.
2. To promote the use of audio-visual aids, locally available materials and community resources.
3. To establish in-service on the job training in the production of printed textbooks and other instructional materials for learners and teachers guides, and multi-media materials, aiming to improve the quality of transmitting knowledge at a reasonable cost.

Expected major outcome (in global terms)

A greater number of learners will be reacheed through increased availability of the various educational and information technology methods and techniques.

Monitoring and evaluation procedures

During the fourth programming cycle, the emphasis will be not only on consolidating what was found successful during the third cycle, but also to explore emerging information technologies, and multi-mass media.

Programme area: Educational technology and information technology including production of reading materials and low-cost teaching aids.

Action programme: EDT/1. Development of instructional technology using new media, self-learning and group work aiming at self-development of learners.

Purpose:

The main purpose of this action programme is the mobilization of the human resources available in the region to promote self-reliance in achieving universalization of primary education, eradication of illiteracy, rural development and non-formal education. Another major aim is the development of instructional technology suitable to local needs, cultural background and socio-economic situations. Mass media is expected to be used effectively to reach people in the remote areas, out-of-school population, people at work places and at home. The mass media applicable to this purpose is different in some aspects from the technology used for instruction through highly sophisticated equipment in formal education.

Specific objectives:

1. To examine the state of the art in the region with respect to the use of instructional technology and the development of self-learning systems.
2. To implement effective strategies and procedures for developing self-instructional packages to promote the use of mass media.
3. To acquaint educational personnel including educational planners and administrators with instructional technology for and with the concept of self-instruction.
4. To implement projects for developing innovative strategies and methodologies on experimental basis.
5. To conduct national workshops (assisted by mobile teams) for the training of key personnel of Member States, in specific areas of information technology and use of mass media for out-of-school population.
6. To evaluate the methodology applied for the development of self-instructional packages, including the use of mass media.
7. To formulate a plan for large-scale implementation of self-instructional systems.

Target population:

1. Pupils in small schools.
2. In-service teachers
3. Personnel involved in rural development and UPE
4. Personnel concerned with the utilization of mass media
5. Mass media specialists
6. Specialists in information technology

Special consideration:

Following information should be provided:

1. Inventory of projects implementing instructional technology research.

2. Inventory of centres/institutions producing self-learning materials; training packages.
3. Roster of specialists in information technology.

Expected outcomes:

See the following pages, last column.

Activities:

See below.

Activities (EDT/1)

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Expected outcomes of activity*
EDT/1.1	Survey on the state of the art and regional planning meeting	10 days	Regional meeting	Experts in instructional technology and information technology	Studies on the state of the art and plan of action
EDT/1.2	Production of prototype self-instructional materials	Continuous	Development of materials in the countries		Prototype module for self-instruction
EDT/1.3	Study visit	15 days	Study visit	Educators implementing mass media for out-of-school children	Study visit report
EDT/1.4	Sub-regional workshop on implementation of mass media	10 days	Workshop	Educationists and specialists in participating countries	Plan for implementation of mass media
EDT/1.5	Regional seminar on use of self-instructional learning package	6 days	Seminar	Educators involved in development of self-instructional learning packages	Set of guidelines for production and utilization of self-instructional learning packages
EDT/1.6	National workshops on development of self-instructional learning packages	15 days	Workshops	Teachers, teacher educators, and material production specialists	Self-instructional materials
EDT/1.7	Training course	3-6 months	Training at international training centre*	Specialists in production of self-instructional materials	Materials for self-instruction
EDT/1.8	Mid-term regional review and planning meeting for evaluation of the effectiveness of instructional media materials	7 days	Review meeting	Educators and media people in the participating countries	Evaluation report and plan for future development

* OIC: OKINAWA International Centre, INNOTECH

Linkage

1. UPE
2. Education for rural development
3. Science and technology for all
4. Training of educational personnel

* * * * * * *

Programme area: Educational technology and information technology including production of reading materials and low-cost teaching aids.

Action programme: EDT/2. Proportion of educational use of information and communication technology.

Purpose:

To overcome the gap between highly developed and less developed societies, emphasis should be placed on educational use of information and communication technology for the efficient dissemination of scientific and technological knowledge, and for strengthening the relation between remote societies. The rapid development of technology and reduction of its cost facilitate its educational use in many countries.

Development of the methodology for educational use of new information technology, especially that of computer, is urgently needed in the region. Some countries are introducing the use of micro-computers in classrooms, others are developing educational information management system by using computers, and others are still facing the urgent need to increase the number of specialists in computer technology. Computer software for general purpose such as spread sheet programme, graphic representations and database are commonly used in the field of business and industries. These functional softwares are also expected to be widely used in educational systems by pupils as well as by teachers and administrators, along with word processors.

Specific objectives:

1. To acquaint educators with the present state of development of new information technology and its potential for educational use;
2. To promote the use of information technology in education;
3. To conduct feasibility studies regarding the use of information technology in education;
4. To study the compatibility of for computer software including transferability of resources;
5. To develop learning packages for acquainting educators with the importance of new information technology and to provide basic knowledge about computers.

Target population:

Teacher educators, in-service teachers and educational planners and administrators.

Expected outcomes:

See the following pages, last column.

Special consideration:

1. Joint projects of ACs
2. Inventory of projects in the region
3. Roster of specialists in the region.

Activities:

See below.

Activities (EDT/2)

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Expected outcomes of activity*
EDT/2.1	Sub-regional study group meeting on use of information and communication technology in education	7 days	Sub-regional meeting	Specialists in information technology	Report on the existing state of information technology with a proposed plan for future actions
EDT/2.2	Study visits	15 days	Study visits in 2-3 countries	Specialists in information technology	Report
EDT/2.3	Development demonstration package	6 months	Development of package	Experts and practitioners	Demonstration package
EDT/2.4	National workshops on use of information technology in education	14 days	Training workshops	In-service teachers and teacher educators	Trained educators in use of information technology in education
EDT/2.5	Training course on production of software materials	3-6 months	Training at international training centre*	Trainees in production of materials	Acquisition of practical knowledge for production of software materials
EDT/2.6	Monitoring and evaluation meeting	7 days	Sub-regional meeting	Experts and leading practitioners	Evaluation of project, with findings leading to further action

* OIC: OKINAWA International Centre located in Japan, INNOTECH, etc.

Programme area: Educational technology and information technology including production of reading materials and low-cost teaching aids.

Action programme: EDT/3. Development and training of appropriate technology, and promoting the production and distribution of instructional materials low-cost teaching materials and equipment.

Purpose:

Development of instructional materials of high quality at low-cost is needed in the region, especially in small populated states or areas. During the Third Programming Cycle, several attempts have been made to stimulate the development and efficient distribution of such materials. Handbooks, manuals and reference materials have been developed. The study of these experiences and their synthesis for the better use of appropriate technology is to be promoted during the fourth programming cycle of APEID.

Specific objectives

1. To develop further and to implement appropriate technologies and teaching/learning materials which have been developed during the third programming cycle.
2. To compile an inventory of handbooks, manuals and reference materials developed in the region and to synthesize the methodologies of production of instructional materials.
3. To develop training packages for specialists in the production of instructional materials.
4. To implement the training packages in participating countries and to evaluate their effectiveness.
5. To promote the distribution of information on the establishment and experience of resource centres with a view to facilitating the formulation of national policies.

Target population:

1. Beginners in production of materials
2. In-service teachers

Activities:

See the following page.

Expected outcomes

1. Compilation of reference materials
2. Guidelines on production of materials.
3. Evaluation instruments
4. Methodology for production of materials and their implementation

Activities (EDT/3)

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Expected outcomes of activity*
EDT/3.1	Regional study group meeting on the state of the art in development of materials	10 days	Regional study group meeting	Specialists in development of appropriate technology	Report on the state of the art and plan for future development
EDT/3.2	Experts group meeting to compile reference materials for training and developing training packages	7 days	Experts group meeting	Experts in development and production of materials	Reference materials and guidelines for development of materials
EDT/3.3	National Workshops (assisted by mobile team)	18 days	National training workshops		Trained personnel in the production of materials
EDT/3.4	Attachments/internships	3 weeks	Study at other ACs.	Specialists in materials production	Trained specialists
EDT/3.5	Review and evaluation meeting	8 days	Subregional meetings (2)	Specialists in the participating countries	Evaluation instruments and development of methodology for materials production and implementation

Linkages:

1. Science and technology education
2. Education for rural development
3. UPE
4. Education for the world of work

* * * * * * *

Programme area: Educational technology and information technology including production of reading materials and low-cost teaching aids.

Action programme: EDT/4. Development of computer literacy programmes for general education and teacher training programmes.

Purpose:

Recent progress of information technology, especially computer technology, requires every citizen to be aware of its impact on work and life. Computer awareness and computer literacy are becoming a basic requirement in the future. Computer literacy education has been developed in some countries in the region and will be needed in other countries during the fourth programming cycle.

Specific objectives:

1. To conduct a survey on present experiments in computer literacy education.

2. To share experiences in computer literacy education.
3. To exchange curriculum for computer awareness programmes.
4. To undertake comparative study on computer literacy programmes.
5. To develop teacher training package for computer literacy education.
6. To implement the curriculum for computer literacy on an experimental basis.
7. To evaluate the results of the implementation of the curriculum for computer literacy education.
8. To evaluate the effectiveness of the non-formal teacher-training package for computer literacy.

Target population

1. Educators in formal and non-formal systems
2. Pupils in schools
3. Adults, out-of-school

Expected outcomes

1. Reports on the state of the art
2. Curriculum for computer literacy
3. Training packages and materials on computer literacy
4. Increased awareness and competencies of learners
5. Evaluation instruments

Linkage

1. Science and technology education
2. Education for the future
3. Curriculum development

Activities:

See the following page.

Activities (EDT/4)

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Expected outcomes of activity*
EDT/4.1	Study group meeting to compile experiences and to exchange curricula	7 days	Study group meeting	Specialists in computer education	Report of the study group meeting
EDT/4.2	Sub-regional meeting for the formulation of a plan for a comparative study and case studies	7 days	Sub-regional meeting	Specialists in computer education	Plan for comparative study
EDT/4.3	Conducting case studies	3-6 months	Case studies	Specialists in computer education	Case studies
EDT/4.4	Attachments/internships	3-6 weeks	Internships	Teachers or specialists in computer education	Trained specialists
EDT/4.5	Study visit on computer literacy	15 days	Visit	Specialists in computer literacy	Observation report on the state of the art of computer literacy
EDT/4.6	National workshops (assisted by mobile team)	15 days	Training workshops	Teachers, computer specialists	Training package and materials on computer literacy
EDT/4.7	Review and evaluation meeting	7 days	Mid-term evaluation meeting	Specialists in computer education and computer literacy	Evaluation instruments and report on the state of the art

Programme area: Distance education (DED)

Trends and issues:

Distance education enables learning to occur without the attendance of learners at scheduled classes at fixed locations. Learners can control what they learn provided they are motivated and are supported by well designed learning materials and delivery systems. Distance education is economical: the extra costs of systematic design, production and delivery are outweighed by a variety of savings.

State of the Art: Some countries in the region (e.g. Australia, New Zealand) have long-established systems serving several levels of education i.e. school, teachers college, technical institute, university and aspects of non-formal education. They use several media: correspondence, radio and television, audio- and video cassettes, telephone tutorials, brief face-to-face meetings, travelling teachers and local learner support activities and other techniques. Other countries have focused on teacher education, for in-service, on-the-spot upgrading of teachers' qualifications and the introduction of changes in curriculum and teaching methods using various learning packages. Some provide broadcasting services to provide content for lessons advice to teachers about instruction and support for other study materials used by distance learners. Several countries in the region are extending their use of distance education, including into the non-formal sector; others are actively introducing distance education, especially for teachers. Some specific issues in this area are as follows:

1. Systematic course and materials design
2. Effective interaction between learners and instructors
3. Credit worthiness vis-a-vis conventional courses
4. The role of distance learning courses and materials within conventional schooling
5. Extension of distance education to different clienteles than teachers
6. Role of new instructional and information technologies

Purpose:

To develop from recent experience the scope to improve the quality of present distance education systems and use them for wider purposes especially in relation to UPE and EOI, in formal and non-formal sectors.

Specific objectives: These are:

1. To increase the efficiency of distance operations, especially in course design, materials production and delivery systems
2. a) To improve communication between distance learners and teachers;
   b) To devise learning support mechanisms that provide tutoring, guidance and shared learning.
3. To ensure parity of esteem for distance education with conventional education and its qualifications.
4. To support deficient conventional schooling with learning resource materials and support mechanisms provided by distance education.

5. To ensure that where distance education would provide prompt training of personnel for innovative educational development its scope and potential is considered.
6. To respond to the possibilities offered to distance education by new instructional and information technologies.

Action areas: Areas for action include:

1. Design of courses for training new personnel involved in UPE and EOI, including para-professional non-formal educators.
2. Using distance education methodologies for the design, production and use of materials for community-based, non-formal education.
3. Sharing experiences and strategies for achieving parity of esteem for distance education informal education.
4. Introducing new technologies while still ensuring the economy and interactiveness of distance education.

Special considerations:

1. Home or village bound students
2. Areas with difficult terrain (scattered islands, mountainous regions);

Delivery systems in these situations are especially challenging (e.g. because correspondence relies on reliable mail services, broadcasting on wide transmission and the distribution of receivers) but there are strategies to circumvent such difficulties; new communication technologies have significant implications, and limitations.

Expected major outcomes:

1. Training capacity and courses in distance education for UPE and EOI personnel
2. Courses resource materials and instructional support structures to meet needs of early school leavers, out-of-school youths and illiterate adults.
3. Parity of esteem between distance education courses and conventional courses.
4. Efficient application of new technologies to distance education.

Monitoring and evaluation:

1. Training capacity/courses are measurable by quantitative increase.
2. Courses for clientile of UPE and eradication of illiteracy and personnel require qualitative evaluation; this is often built in to new distance education courses as part of their systematic design.
3. Parity of esteem can be evaluated practically and quantitatively by salary rates and promotion prospects resulting from distance education qualifications; apart from that it is likely to remain arguable until leadership positions are held by people educated by distance means.
4. Efficiency and cost-effectiveness criteria should be established as new technologies are assessed and introduced.

Programme area: Distance Education.

Action programme: DED/1. Parity of Esteem.

Purpose:

1. To improve qualifications achieved through distance education as compared with conventionally achieved qualifications.
2. To provide opportunity for the interpersonal exchange and critique of ideas which is lacking in distance education.

Specific objectives:

1. To raise esteem of distance education qualifications to parity with conventional qualifications in situations that are practical and visible
2. To at least match standards of conventionally educated students with those of distance education students in appropriate situations e.g. at common examinations hold for both for similar courses by post graduate performance if courses differ, etc.
3. To construct courses and materials that draw on and extend the contribution of high quality teachers and attract approval and enrolment for their quality
4. To develop instructional materials that create personal response and vicarious interaction with original teachers; to promote inter-mediary tutors able to provide personalized, critical responses to students assignments and exercises
5. To develop learner support services that compensate for the lack of face to face interaction with teachers and fellow students
6. To enable and allow teachers in conventional courses to use materials prepared for distance education
7. To recognize and proclaim instances of high performance by professional and public activities when achieved by distance graduates
8. To achieve parity of esteem in salary schedules and promotion

Target groups:

Senior official and administrators; Teachers in conventional education institutions; Graduates of distance education; Course developers, tutors and other teachers in distance education.

Special consideration:

Countries with very conventional outlook on qualifications.

Activities:

See the following page.

Activities (DED/1)

No.	*Activity Title*	*Duration*	*Method of Operation*	*Categories of Personnel to Participate*	*Monitoring and Evaluation*	*Expected Outcome*
DED/1.1	Analysis of issues	6 months	research/comparative study	key distance educators; researchers	guidelines, deadlines, review	Regional study of regional problems and solutions
DED/1.2	National review of attitudes and courses	1 week	TWG	as above, representatives of all other target groups	meeting self-evaluation	Strategies for changing attitudes
DED/1.3	Ensuring quality: training/materials development	continuous	course development; personnel training	Course developers & other distance educators	In-course evaluation methods; adoption rate by other institutions	Reputable courses, widely used outside distance education
DED/1.4	Campaign to seek parity	continuous	Professional associations of teachers, distance educators, alumni	distance educators; alumni	professional association reports; evaluation report after 6 months	Parity of salaries, promotion, esteem

Monitoring and evaluation:

In-built quality control of materials and system evaluation of 'campaign' after six months.

Expected outcomes:

Parity of esteem in salaries, promotion, reputability; Comparable performance by distance education graduates; Courses designed with reference to reputability; Increased interaction for distance learners with their educators; Diffusion of distance education materials into conventional teaching.

Linkages.

Teacher education
Instructional/educational technology
Planning and administration
Linkages of formal and non-formal education

Programme area: Distance Education.

Action programme: DED/2. Using distance education for strategic developmental tasks:

1. Supplementing dificient education in schools;
2. Training para-professional non-formal education personnel for UPE, literacy and continuing education; and
3. Designing and producing materials for community-based, non-formal education.

Purpose:

To increase efficiency of distance education in:

1. Developing methodologies for designing stand-alone learning resource materials and instructional delivery systems independent of schools and specialist teachers.
2. Increasing its potential dividends in many education sectors through investment in systematic organization and management, techniques of materials design, production equipment and delivery mechanisms.
3. Diversifying its programmes to enrich the methodology and innovativeness of systems, make more use of facilities, and encourage larger investment.
4. Overcoming common factors of undeveloped instructional materials and shortage of personnel for the particular tasks and organizational structures at the local level.
5. Diversifying its instructional styles and accustoms learners to independent learning.

Specific objectives:

A. **Supplementing school:**

1. To enrich school curriculum without recruiting local specialist teachers
2. To provide non-specialist teachers with resource materials for subjects beyond their normal competence
3. To diversify instruction within schools
4. To accustom learners in school to independent learning that will facilitate continuing education after school

B. **Training para professional non-formal educators:**

1. To provide training materials appropriate to the needs of non-formal educators
2. To design courses that illustrate principles of non-formal and continuing education
3. To intensify the impact of non-formal education on community education

C. **Designing/producing materials for non-formal education**

1. To provide resource materials for non-formal education
2. To diversify the instructional styles employed in distance education

Target groups

A. **Supplementing school**

1. Teachers and learners in schools
2. Non-formal educators engaged in non-formal, continuing education modes of presentation of school curriculum

B. **Training para professional non-formal educators:**

1. Educators responsible for developing non-formal education
2. Course developers from distance education units
3. Curriculum developers.

C. **Designing/producing materials for non-formal education**

as B above

Special considerations:

General significance.

Activities:

See the following pages.

Monitoring and evaluation:

1. In-built quality control of materials.
2. Investment analysis and evaluation for expanded distance education systems.

Expected outcomes:

A. Enriched schooling; more continuity with non-formal continuing education

B. and C. Accelerated development of non-formal education. Prompt efficient training, immediately renewable.

A, B and C. Enriched distance education operation with greater return for investment.

Linkages

All formal education, non-formal education and linkages between them.

Educational technology

Curriculum development, especially non-formal

Personnel development.

Activities (DED/2)

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcome of activity*
	A. Supplementing school:					
DED/2.1	Exchange of experiences	3 x one week	Sub-regional TWG	School level distance educators; senior teachers from small schools; non-formal educators in continuing education	In-built education	Analysis of issues; Exchange of experiences; Identification of tasks
DED/2.2	National follow-up workshop	one week	Workshop	National members of sub-regional TWG; senior curriculum officials; representative teachers from schools; distance educators at school level; non-formal educators in continuing education	In-built workshop evaluation, follow-up study of progress in implementation of change after one year	as above; plus strategy, methods and commitment for implementation
	B. Training para-professional non-formal educators:					
DED/2.3	National study of training needs	3 months	Needs analysis: research	Researches with non-formal educators	Impact on later discussion	Reports on personnel needs, competencies, requirements, learner resources
DED/2.4	Regional analysis of methodology	one week	TWG	Researchers who compiled national studies; representative distance education course developers; non-formal educators especially concerned with training	In-built evaluation; impact on training strategies	Guidelines for course development. Training needs description.

No.	*Activity title*	*Duration*	*Method of Operation*	*Category of personnel to participate*	*Monitoring and evaluation*	*Expected outcome of activity*
DED/2.5	Inter-country joint development projects	At intervals over two years period	Attachments;mobile workshop	Distance Education course developers; non-formal education specialists especially for training	End-of-activity evaluations	Exchange of experiences; shared course development at initial stages
DED/2.6	National courses development	4-6 months	Course development team	– do –	Course materials trial and testing; and testing; and continuing evaluation	Courses; exchange of courses
	C. Designing/production materials for non-formal education					
DED/2.7	National study of materials resources needs (not exclusively distance education)	Presumably part known; if so, continuous updating	Feedback from field	Non-formal educators	Presumably by public scruting, official accountability	Curriculum/course needs for expanding field of non-formal continuing education
DED/2.8	Regional analysis of materials design and development	two weeks	TWG with national case studies prepared in advance	Non-formal educators; distance education course developers	In built evaluation; Impact on course development strategies	Guidelines for course developments
DED/2.9	Two/three country joint development projects	3-6 months at intervals	Joint innovative project	Course developers and non-formal educators from two or three countries	End of activity evaluation	Exchange of experience and idea in early stages of course development
DED/2.10	National course development	continuous activity	Course development teams	Distance education course developers; Non-formal educators	Course materials trial/test phase; continuous evaluation and revision	Courses; exchange of materials with partners in joint innovative project

ANNEXES

Annex I

LIST OF PARTICIPANTS

A. Participants

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20.	Mr.	Ansar Ali Khan	–	,, ,,
21.	Ms.	Namtip Aksornkool	–	,, ,,

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2.	Mr.	Zhou Nanzhao	–	China
3.	Mr.	Jogi N. Guivalu	–	Fiji
4.	Dr.	Moegiadi	–	Indonesia
5.	Dr.	G.A. Haddad Adel	–	Iran
6.	Mr.	Toshio Kanaya	–	Japan
7.	Mr.	Ramesh Jung Thapa	–	Nepal
8.	Dr.	Geraldine McDonald	–	New Zealand
9.	Dr.	Dolores Hernandez	–	Philippines
10.	Dr.	Jong Ha Han	–	Republic of Korea
11.	Dr.	Pham Minh Hac	–	Socialist Rep. of Viet Nam
12.	Dr.	Nguyen Minh Duong	–	Socialist Rep. of Viet Nam
13.	Mr.	Phi Van Gung	–	Socialist Rep. of Viet Nam
14.	Mr.	Vivek Pangputhipong	–	Thailand
15.	Mr.	Pisarn Soydhurum	–	Thailand
16.	Dr.	M.C. Pant	–	Consultant
17.	Mr.	A.I. Dyankov	–	Secretariat member
18.	Mr.	B. Cahill	–	,, ,,
19.	Mr.	M. Ashraf Qureshi	–	,, ,,

GROUP III: SUPPORTING ACTIVITIES AND INFRASTRUCTURES COMMON TO ALL EDUCATIONAL LEVELS AND SYSTEMS

1.	Mr.	Said Nejatullah Hussiani	– Afghanistan
2.	Dr.	Md. Nurul Huq	– Bangladesh
3.	Mr.	Anand Sarup	– India
4.	Prof.	Haruo Nishinosono	– Japan
5.	Mr.	Maydom Chanthanasinh	– Lao People's Dem. Rep.
6.	Mr.	Am Pathammavong	– Lao People's Dem. Rep.
7.	Dato'	Hj. Mohd. Ghazali bin Hj. Hanafiah	– Malaysia
8.	Prof.	Donald Bewley	– New Zealand
9.	Dr.	Ran Soo Kim	– Rep. of Korea
10.	Mr.	D.A. Perera	– Sri Lanka
11.	Mr.	Paula S. Bloomfield	– Tonga
12.	Dr.	Kamol Sudaprasert	– Consultant
13.	Mr.	H.K. Paik	– Secretariat member

The Asia and Pacific Programme of Educational Innovation for Development (APEID) has as its primary goal to contribute to the building of national capabilities for undertaking educational innovations linked to the problems of national development, thereby improving the quality of life of the people in the Member States.

All projects and activities within the framework of APEID are designed, developed and implemented co-operatively by the participating Member States through nearly 200 national centres which they have associated for this purpose with APEID.

The 26 Member States participating in APEID are Afghanistan, Australia, Bangladesh, Bhutan, China, Fiji, India, Indonesia, Iran, Japan, Lao People's Democratic Republic, Malaysia, Maldives, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Samoa, Socialist Republic of Viet Nam, Sri Lanka, Thailand, Tonga, Turkey and Union of Soviet Socialist Republics.

Each country has set up a National Development Group (NDG) to identify and support educational innovations for development within the country and facilitate exchange between countries.

The Asian Centre of Educational Innovation for Development (ACEID), an integral part of the UNESCO Principal Regional Office for Asia and the Pacific in Bangkok, co-ordinates the activities under APEID and assists the Associated Centres (AC) in carrying them out.

In the fourth cycle of APEID (1987–1991), altogether 14 areas of concentration are proposed, which are grouped into three major programme areas as follows:

1. Education for all;
2. Making education relevant to societal requirements; and
3. Supporting activities and infrastructures common to all levels and systems.